

TU
378.4961
N362
Mar. 1958

PN-ARE-380

SEMIANNUAL REPORT

OF

UNIVERSITY OF NEBRASKA

INTERNATIONAL COOPERATION ADMINISTRATION

OMNIBUS CONTRACT

TURKISH UNIVERSITY PROGRAM

PERIOD ENDING MARCH 31, 1958

A.I.D.
Reference Center
Room 1000 NS

INDEX

	Page
SUMMARY	
I. Ankara University	1
II. Ataturk University	1
III. Personnel	3
IV. Participant Training	4
OUTLOOK	
New Contract	5
Participant Training	5
University of Nebraska Staff to Turkey	5
REPORTS FROM FIELD	
Dr. Otto G. Hoiberg, Chief Advisor Nebraska Group in Turkey	7
Harold L. Allen, Specialist, Extension and Information	15
E. C. Conard, Specialist, Range Management	23
Robert L. Fox, Specialist, Soil Science	25
Fred F. McKenzie, Specialist, Artificial Insemination	28
W. W. Ray, Plant Pathologist	32
Mary Rokahr, Home Economist	33
Paul Weigel	43
FINAL REPORTS OF STAFF RETURNED FROM TURKEY	
Cecil T. Blunn, Specialist, Animal Husbandry	46
L. L. Claypool, Specialist, Fruit and Vegetable Storage	48

SUMMARY

As outlined in previous reports, there are two phases of the Nebraska contract providing for a distinct division of activities and expenditures. One has to do with assistance in reorganizing the teaching and research activities in the Faculties of Agriculture and Veterinary Science of Ankara University located in Ankara. The second provides for the development of a New University in Eastern Turkey known as Ataturk University at Erzurum.

This report marks the conclusion of three years of activity which started with the signing of the contract on March 28, 1955. This contract will terminate on May 31, 1958, unless superseded by a new contract on or before that date. The Government of Turkey through its Ministry of Education and Ankara University has requested an extension of cooperation with the University of Nebraska through 1961 by an extension of the present contract or a new contract. Tentative agreements have been reached between the International Cooperation Administration and the University of Nebraska for a new contract to supersede the present one. This follows closely the proposed format for a uniform contract as presented last year by ICA. An original commitment of funds under the new contract is anticipated through June 30, 1959.

I. ANKARA UNIVERSITY

This phase of the program has continued to require the major emphasis from University of Nebraska field staff members. The progress in carrying out the Ankara phase of the contract has been very gratifying. Reactions from field staff as presented in their reports herewith give a basis for expecting that the major objectives and purposes are being realized, although the timetable is slowed up somewhat from the original schedule.

The new contract contemplates a phasing out of some technical assistance to Ankara University as assignments of present personnel are completed. Continuation of technical assistance in the fields of Agricultural Extension, Home Economics, Agricultural Economics and in the field of Veterinary Science is contemplated through provisions of the new contract.

Thirty-two man years of participants are proposed from Ankara University to study in the United States over the next three-year period.

II. ATATURK UNIVERSITY

The development of plans for this new University in Erzurum has progressed to the point where there now seems general agreement to the opening of the University for classes in the fall of 1958. To accomplish this, it will be necessary for building space to be rented in Erzurum pending the completion of some of the buildings as planned on the new campus. All building operations were at a standstill during severe winter months but are being renewed vigorously when weather permits.

Under provisions of the new contract, it is proposed to supply the following staff from Nebraska for Ataturk University as the need may arise and personnel can be found to fill such positions at Erzurum:

- Associate Chief Administrator
- Arts and Science Specialist (now filled by Dr. Schneider)
- Architect and Engineer (now filled by Prof. Weigel)
- Extension and Information Specialist
- Agronomist
- Animal Husbandry Specialist
- Agricultural Economist
- Library Consultant
- Administrative Assistant
- Secretary
- 8-man years to be assigned as need arises

Dr. Ahmet Ozel, formerly Minister of Education in the Turkish Cabinet, has been appointed to the position of Rector or President of Ataturk University.

Dr. Prof. Isfendiye Esat Kadaster, formerly of the University of Ankara, has been appointed the Dean of the Faculty of Agriculture of the new Ataturk University.

III. PERSONNEL

UNIVERSITY OF NEBRASKA STAFF IN TURKEY During October 1, 1957 to March 31, 1958

<u>Name</u>	<u>Position</u>	<u>Period of Assignment</u>	
		<u>From</u>	<u>To</u>
ALLEN, Harold L.	Extension and Information Specialist	Sept. 17, 1956	Sept. 17, 1958
BLUNN, Cecil T.	Animal Breeding Specialist	Feb. 25, 1956	April 15, 1958
CLAYPOOL, L. L.	Fruits & Vegetable Storage Specialist	Jan. 21, 1957	Feb. 28, 1958
CLONINGER, R. H.	Secretary	Oct. 25, 1956	May 31, 1958
CONARD, Elverne C.	Range Management Specialist	May 11, 1956	June 30, 1958
FOX, Robert L.	Soils Specialist	Aug. 20, 1956	Aug. 20, 1958
HOIBERG, Otto G.	Chief Advisor	June 1, 1957	June 1, 1959
LESOING, Doris	Secretary	Oct. 7, 1957	Oct. 7, 1959
MCKENZIE, Fred F.	Artificial Insemination Specialist	Aug. 20, 1956	Aug. 20, 1958
NEEMAN, Bonnie	Secretary	Feb. 20, 1956	Nov. 18, 1957
RAY, W. W.	Plant Pathologist	June 20, 1956	Aug. 20, 1958
ROKAHR, Mary	Home Economist	June 11, 1956	July 11, 1958
SCHNEIDER, Carl J.	Arts & Science Specialist	June 24, 1957	June 24, 1959
SIMMS, B. T.	Veterinarian	July 1, 1957	July 1, 1959
STEELE, John C.	Irrigation Specialist	March 10, 1956	June 15, 1958
WEIGEL, Paul	Architect	June 1, 1957	June 1, 1959
WOLLEN, Mary Jane	Secretary	March 1, 1957	March 1, 1959

IV. PARTICIPANT TRAINING

Prior to October 1, 1957, sixty-seven participants had come from Turkey to study under this contract. Two additional participants arrived during the period of this report making a total of 69 who have been received for training. Fourteen of this number are being trained to staff the new Ataturk University.

A total of seven participants from Ankara University and one from Ataturk University have completed their assignments and returned to Turkey during this period, making a total of 44 who have returned to their former positions. It is understood that Dr. Ali Aras, the Ataturk participant, will continue his work at the University of Ankara until the opening of Ataturk University in October of this year.

New arrivals during this report period:

Dr. Burhan Pekin, Physical Chemistry (Ataturk)

Miss Refika Dogan, Home Economics (Ankara)

Evaluation of Participant Training:

Cooperation of participants' advisors in appraising progress of training under this program has aided greatly in determining ways of improving facilities and methods to secure the best results.

Language Difficulties:

Too often the participant does not have sufficient understanding of English to grasp much of what is said to him on arrival in the United States. Concentration on English training is, therefore, necessary and special classes have been set up to supply this need.

Orientation is made a continuous process with special Seminar courses conducted weekly for all who can attend. The cooperation of the University staff people on these meetings has been most helpful. Community cooperation in receiving participants and their families into home and community activities has also been gratifying.

Cooperation of other Institutions:

Almost every Land-Grant College or University in the United States has been called upon for cooperation in receiving one or more of our participants for varying periods of training. The response has been exceptionally gratifying with cordial reception given in all instances. This reflects not only the fine cooperative spirit of these receiving institutions but also a high caliber level for the participants who are received.

OUTLOOK

New Contract

The University of Nebraska has agreed to the consideration of a new contract with ICA/W to supersede the present contract which expires on May 31, 1958. It is proposed that the new contract incorporate all of the provisions that had to be provided by amendments under the original contract. Specific provisions should also be made for the following:

1. Educational allowances for staff members with children of school age.
2. Storage of household goods for staff members while on assignment.
3. Provisions for home leave for staff members returning for second assignment.
4. Clarification of allowances for insurance and special costs.
5. Clarification of documentation requirements.
6. More autonomy for the University in making decisions pertaining to the details of administration.

Participant Training

There is a trend toward reduction in the number of participants in training for Ankara University and a corresponding need for increase in training of participants for Ataturk University. Since the supply of staff for Ankara University is below their needs, it is difficult to secure approval of Ankara staff to go to the new Ataturk University. This applies particularly to the older and more experienced staff members. The trend, therefore, is for Ataturk participants to be younger and come with less academic training. Therefore, they need longer periods of training for degrees. Language requirements for such training must be higher than normally required for observational training. This situation will constitute a bottleneck in the development of the desired participant training for Ataturk University.

University of Nebraska Staff to Turkey

Among the major needs and responsibilities under an extended program are for more Nebraska staff to assist in instituting the new Ataturk University. Great difficulty is envisioned in filling some of the listed positions. It is hoped to secure middle-age personnel with experience who should be better fitted to meet the comparatively rigorous conditions of living at Erzurum. Fewer persons in this age group are interested in breaking away from established positions. The young people who have not yet established themselves are generally not fitted to meet the requirements. It seems that the group who are approaching retirement must be depended upon to fill the needs.

One of the major objectives of the entire program is to assist Turkey in establishing a land-grant type university which will render the type of services

to Turkish people that American people have experienced from their so-called land-grant colleges and universities. The immediate responsibilities resting on the University of Nebraska in this regard are very great. The ground work has been laid for the opening of this type of University at Erzurum this fall. Proper guidance in its early stages is essential. By rendering successful service in this effort, the University of Nebraska will strengthen its own understanding and confidence in its objectives, its methods and accomplishments in service to Nebraska people.

Report
(October 1, 1957 to March 31, 1958)

by

Otto G. Hoiberg, Chief Advisor

A. PERSONNEL AND OFFICE MATTERS

1. (a) Miss Doris Lesong arrived in Ankara on October 17, 1957, to replace Miss Bonnie Neeman as Head Secretary of the Nebraska office. Miss Neeman left Ankara on October 17, after an intensive two-day briefing of her successor.
- (b) Dr. L. L. Claypool, Specialist in Storage of Fruits and Vegetables, completed his assignment, and departed from Ankara with his family on February 2, 1958.
- (c) Dr. Cecil T. Blunn, Animal Breeding Specialist, completed his assignment and departed from Ankara with his family on March 22, 1958.

As of March 31, 1958, the personnel total stood at fourteen: eight assigned to Ankara University, two to Ataturk University, three secretaries, and the Chief Advisor.

2. During the first week of January, the downtown Nebraska Office was moved to a new location, Inhamur Sokagi 12, approximately three blocks from its former offices at "Piknik". The present building is an erstwhile residential structure, now converted to office use, with the Nebraska Group occupying most of the ground floor and the Rector of Ataturk University and his staff having their offices upstairs. The change represents a vast improvement, so far as both the Nebraska and the Ataturk University personnel are concerned, and the Ministry of Education has made a real effort to provide attractive furnishings. The Nebraska Group is still in need of a filing cabinet or two, but in general our situation is favorable.

3. At the request of the appropriate authorities at Ankara University, contract extensions under the Nebraska Program in Turkey were granted, as follows:

Dr. C. T. Blunn: from February 25 to April 15, 1958
Dr. L. L. Claypool: from January 21 to February 28, 1958
Dr. E. C. Conard: from May 11 to June 30, 1958
Dr. W. W. Ray: from June 20 to August 20, 1958
Miss Mary Rokahr: from June 11 to July 11, 1958
Mr. John C. Steele: from March 10 to June 15, 1958

4. Requests were received from the Faculty of Agriculture, Ankara University, (a) for a two-year renewal of Mr. Harold L. Allen's contract as Extension and Information Specialist under the Nebraska Program, and (b) for the appointment of a Home Economics Specialist to replace Miss Mary Rokahr who finds it necessary to return to the United States upon the expiration of her present contract early this summer. Implementation of both requests is in process.

5. Mrs. Regina (Hughes) Cloninger's resignation as secretary on the Ankara University Staff of the Nebraska Group was accepted, effective May 31, 1958. Mrs. Cloninger has given excellent service in Ankara, and her resignation approximately five months prior to the October 25, 1958, expiration date of her contract was for personal reasons.

6. The files of the Nebraska Office at Ihlamur Sokagi have been thoroughly re-organized and cleared of needless documents at the hands of Miss Doris Lesoing and Dr. Carl J. Schneider.

7. Nebraska personnel continue to serve effectively in numerous committee assignments involving collaboration with officials of ICA, the Turkish Ministries of Agriculture and Education, Ankara University, and Ataturk University. Regular staff meetings attended by Nebraska personnel are as follows:

- (a) Weekly ICA Director's meeting for all ICA divisions and branches, attended by Schneider and Hoiberg.
- (b) Weekly meeting of ICA, Food and Agriculture staff, attended by Ray and Hoiberg.
- (c) Bi-weekly meeting of Chief, ICA/Public Services Division, with heads of contract groups, attended by Hoiberg. (Note: Public Services Division is the new name of the former Public Administration and Education Division.)
- (d) Weekly meeting of Nebraska Group, attended by all staff members.
- (e) Weekly meeting of the Ataturk University Development Committee, attended by McKenzie, Ray, Schneider, Weigel and Hoiberg.

B. ANKARA UNIVERSITY

1. Participant Training Program

The only Participant who left for the United States was Miss Refika Dogan, an Assistant in the Department of Home Economics. This brings to three the number of persons who are now in the United States doing graduate work in this subject area.

The return of Dr. Rezan Sahinkaya to the Ankara campus after two years of study in Home Economics at the University of Nebraska was gratifying.

On March 19, 1958, an afternoon tea was given jointly by the Faculties of Agriculture and Veterinary Science at which I spoke briefly and presented certificates on behalf of the University of Nebraska to seven Participants in Agriculture and seven in Veterinary Science who had completed their work in the United States.

Considerable difficulty has been experienced in encouraging the submission of the required final report by Participants who have returned. An examination of our files revealed that a substantial number of such reports were overdue. To remedy this situation, a personal letter was written to each Participant concerned, stressing the importance of early action. The response has been reasonably gratifying but hardly overwhelming.

Conferences were held with the deans of the agricultural and veterinary faculties for the purpose of explaining the probable provisions of the forthcoming renewed Nebraska Contract in Turkey, as it relates to Participants. Steps are being taken in both faculties to assure prompt selection of Participants so that they may be able to begin their work in the United States by next September.

2. Equipment

A considerable number of orders were placed during this period. They may be summarized briefly, as follows:

- (a) Project No. 3 (Crop Production and Improvement)
 - Order #3, 1/29/58: microscopes, power scythe, seed blower, balance, etc.
 - Order #4, 1/29/58: hammer mill
 - Order #5, 2/21/58: magnifiers
 - Order #6, 3/4/58: photographic materials
- (b) Project No. 4 (Agricultural Technology)
 - Order #3, 2/28/58: chemicals
- (c) Project No. 5 (Animal Science)
 - Order #9, 2/28/58: wool squeeze machine
- (d) Project No. 8 (Plant Protection)
 - Order #2, 2/28/58: Bohemian steel pins
- (e) Project No. 11 (Veterinary Science)
 - Order #11, 3/3/58: photofluorometer, incubator, vacuum pump, vacuum oven, pressure cooker, chemicals

We are pleased at the expeditious manner in which our orders are processed through Mr. Gould's office at the University of Nebraska, despite the many complications which can and do arise under a program of this nature. We are satisfied also with the service given by Aero-Sea Shipping Corporation in arranging for the transportation of our goods from New York to Ankara via the S. S. CORUH and S. S. YOZGAT, which appear to be the only Turkish ships available for this purpose.

One big problem is that of getting the goods through Turkish customs after their arrival in Istanbul. Since I came to Turkey last June, Ankara University has been successful in clearing only one shipment through customs, namely the canning equipment which had already arrived on the campus prior to Dr. Baker's departure (permission to uncrate was granted last October). As of March 31, 1958, there were fifteen shipments of Nebraska equipment awaiting customs clearance, several of them having arrived in Turkey last fall.

All equipment coming into Turkey under the Ankara-Nebraska Universities Program is consigned directly to Ankara University. This means that the responsibility for securing customs clearance necessarily rests with the University authorities here. Our Nebraska Office in Ankara is making every conceivable effort to facilitate the clearance process for the University. At about the time a given shipment is expected to arrive in Istanbul, we hand-carry to the Dean of the appropriate faculty all documents needed for customs clearance, with translations into Turkish attached. It is from this point on, that the real delay occurs. What the chief

causes of such delay may be, we have not been able to fully determine; but a partial explanation certainly lies in the apparent tendency here to accept the current situation as perfectly normal. I might add that this difficulty is by no means peculiar to the Nebraska Program. It is particularly regrettable in our case, however, because there is now a grave danger that much of the equipment that has been ordered will not be on hand at the University until the Specialists under whose supervision it was ordered will have returned to their posts in the United States. This poses a problem as to instruction of Turkish personnel in the proper handling and use of the equipment.

3. U. S. Personnel

The Rector of Ankara University was informed by letter that a reduction in number of U. S. personnel at Ankara University would, in all probability, be necessary under the forthcoming renewed Nebraska contract, primarily because of the need for expansion in this regard at Ataturk University. Letters were likewise sent to the deans of Agriculture and Veterinary Science, and a personal conference was held in each case for purposes of clarification and discussion.

The tentative numbers were established at two for the Faculty of Agriculture and one for the Faculty of Veterinary Science. Under this arrangement, the new fields of Home Economics and Extension & Information were given top priority by the Faculty of Agriculture, while no decision was called for at this time in Veterinary Science because no position will have to be filled until the expiration of Dr. Simm's term in July, 1959.

During this period, there was considerable activity on the part of various Nebraska staff members in short-course programs. Illustrative of this was the participation of Dr. Fred F. McKenzie in a ten-day course for veterinarians at Cifteler Hara. Dr. McKenzie lectured twice daily to the twenty-five persons enrolled, drawn from six "haras", several cattle stations, insemination depots, and state veterinary offices. The subjects under consideration were recent developments in livestock fertility, semen preservation, and artificial insemination. A very fine letter of appreciation was written to Dr. McKenzie by the Minister of Agriculture who expressed gratitude for his "interest and effort in bringing this information to our younger veterinarians."

In terms of the objectives of the Nebraska Group in Turkey, the primary significance of such short course activities lies in the encouragement that they give to cooperative effort between Ankara University and the Ministry of Agriculture. Our hope is that the participation of Nebraska Specialists in these programs will promote greater future activity along similar lines by the permanent staff members of Ankara University.

4. Ege University

The question of whether or not Nebraska personnel should be approved to teach at Ege University came to a head during this period. At least four staff members of the Nebraska Group had been approached formally or informally by Ege University to teach regular courses in Izmir this winter. The requests involved regular semester courses, to be taught on an intensive basis for periods varying from two to eight weeks.

A policy statement was accordingly issued by the Nebraska Office stating that it is entirely appropriate for Nebraska personnel to teach short-courses at Ege

University (or anywhere else in Turkey) if no academic credit is given for the courses and if prior approval is received in each case from the appropriate Dean of Ankara University and the Nebraska Office. Where the courses in question are a regular part of the academic program of Ege University, however, approval to teach cannot be granted.

This policy is based upon the facts that:

- (a) There is no authorization in our basic contract for Nebraska Group personnel to engage in regular academic work at Ege University.
- (b) The Director of ICA/Ankara is negatively inclined toward any such teaching assignments.
- (c) There will be a growing need for consultative assistance from most of our Nebraska staff in connection with the development of the Ataturk University program which is now getting underway in earnest.

C. ATATURK UNIVERSITY

1. Rector Appointed

The most significant development relating to Ataturk University during the period was the appointment of a Rektor. The man named to this post is Professor Dr. Ahmet Ozel, a 48-year old electrical engineer who formerly served as Rektor of Istanbul Technical University and as Minister of Education for Turkey.

Rektor Ozel was introduced formally to the Nebraska Group at the December 6 meeting of the Ataturk University Development Committee. He presided instead of Professor Abdullah Turkmen and apparently will continue to do so at future meetings of the Committee.

It is regrettable that this appointment was so long delayed. At the time Ozel took office, less than one year remained until the scheduled opening of Ataturk University. He has, at best, an extremely difficult task on his hands, and there are moments when one wonders how the required timetable can possibly be met.

However, the Rektor appears to be a man of action. Thus far he has impressed us very favorably. His initial effort is being directed toward the development of an organizational chart for the new University. Before this becomes firm, he states, there will be extended discussions involving not only the Ataturk University Development Committee and the entire Nebraska Group, but also the Ministry of Agriculture and ICA.

A source of real concern lies in the fact that final decisions on certain crucial matters relating to organization, curricula, equipment, and personnel can hardly be made until such time as deans have been appointed for the two faculties (Agriculture and Letters and Science), which presumably will be started next fall. If these men are not appointed promptly, an already difficult situation will become critical indeed.

It is anticipated that the Rektor will be able to spend a few weeks at the University of Nebraska this spring. His preference appears to be sometime in May.

2. Dean of Agriculture Appointed

The Faculty of Agriculture, Ataturk University, acquired a Dean about March 1, 1958, with the appointment of Prof. Dr. Isfendiyar Esat Kadaster. The Dean comes from the Faculty of Agriculture, Ankara University, where he is recognized as an outstanding specialist in animal feeding.

Even prior to the formal approval of his appointment, several pertinent members of the Nebraska Group met with the Dean in the Nebraska Office. Our purpose was to explore with him the "land grant college" educational concept. He expressed a real interest in experimental work at Ataturk University and in establishing a close working relationship with the farmers on the lands of Eastern Turkey. He is a vigorous man, and we have been favorably impressed with his general orientation toward the Ataturk University project.

To date no final action has been taken to appoint a dean for the Faculty of Letters and Science. In a personal conference with Rektor Ozel, we learned that a natural scientist is being sought for the position, thus far to no avail. How firm the Rektor is in his desire for a dean from this subject area is not entirely clear, but a discussion of other possibilities with him does not seem to have changed his position. In the meantime, Dean Kadaster has been designated as Acting Dean of the Faculty of Letters and Science.

3. Organization

One of the initial tasks undertaken by Rektor Ozel after his appointment was the development of a preliminary table of organization for Ataturk University, sketching a proposed outline of faculties, departments, research centers, and personnel. His proposals, presented for consideration at the January 10, 1958, meeting of the Ataturk University Development Committee, were as follows:

First, the new University eventually would have six faculties: Civil Engineering and Architecture; Agriculture (and Veterinary Science); Letters and Science; Medicine; Law; and Economics.

Second, the "Letters" section of the Faculty of Letters and Science would include nine "chairs" as follows: Archeology, Geography, Economics, Foreign Languages (English, German, and French), Turkish Language and Literature, History, Political Science and Public Administration, Philosophy and Psychology, and Sociology. The "Science" section would comprise Chemistry, Physics, Geology, Mathematics, Zoology, and Botany.

Third, the "Agriculture section" of the "Faculty of Agriculture and Veterinary Science," would have seven "chairs": Agricultural Technology, Soils Science, Animal Science, Home Economics, Agricultural Engineering, Plant Science and Crop Improvement (Agronomy), and Farm Improvement. No breakdown was given for the "Veterinary Science section."

The above proposals of Rektor Ozel were discussed by the members of the Nebraska Group at two special staff meetings called for this purpose. Our "Comments and Recommendations" in this regard were presented in a written statement submitted and discussed at the January 24 meeting of A.U.D.C. (Copies of this complete statement and of the Rektor's basic document of January 10 were sent to Dr. Marvel Baker

and Mr. Gould with covering letter dated January 25, 1958.) Among the major observations made by the Nebraska Group were the following:

- a. Consideration should be given to organizing the Faculty of Letters and Science as an integrated whole, rather than attempting to divide it into two sections of "Letters" and "Science," respectively.
- b. The proposed "Faculty of Agriculture and Veterinary Science" could logically be renamed the "Faculty of Agriculture." Such instruction as will be given along veterinary lines at Ataturk University will probably be in the nature of courses that are helpful to students of agriculture rather than courses designed to train people as veterinarians.
- c. Caution should be exercised to avoid premature establishment of "research centers" proposed for the Faculty of Agriculture and the Faculty of Letters and Science.
- d. The structure of the Faculty of Agriculture should facilitate the implementation of its three essential functions: residential instruction, research, and extension. As the program of the Faculty matures, consideration should be given to the appointment of an Assistant Dean for each of these three areas of operation.
- e. Clarification of the Rektor's proposal for a "Faculty of Economics" seems desirable, in view of the fact that a "chair" of Economics has been included in the Faculty of Letters and Science.

4. Curriculum

There is still general agreement that the Ataturk University curriculum which was prepared and adopted by the Ataturk University Development Committee in 1955, can be used, with some alterations, as a guide to course offerings in both Agriculture and Letters and Science if adequate staff, classrooms, laboratories, and equipment are available.

A strong possibility exists, however, that no laboratory facilities will be ready for use by the fall of 1958, because (a) it is now virtually certain that none of the new buildings on the Ataturk University site will be ready for occupancy by that time, and (b) it seems clear that none of the equipment to come in under the Nebraska Program will be on hand by the opening date (see Section 5, below). With the prospect of no laboratories for the first year thus in view, our Letters and Science Advisor developed a revised version of the 1955 proposals, shifting all laboratory courses from the first two semesters and replacing them with non-laboratory courses from semesters three to eight. Having this revision, as well as the original 1955 document now on hand, it will be possible to expedite final determination of the 1958-59 curriculum offerings as soon as the nature of the physical plant to be used has been clarified.

Data on the latter point can be satisfactorily obtained only by a personal visit to Erzurum. Such visit is being planned for mid-April. It should provide essential details not only on classroom, laboratory, and office space that is available in the city of Erzurum for temporary use by Ataturk University, but also on temporary faculty and student housing that could be used.

5. Participant Training Program

During the period, one Turkish participant left for study in the United States. He is Dr. Burhan Pekin and he was secured from the Turkish Army and sent to study in the field of Physical Chemistry.

6. Personnel

- a. Turkish staff -- Practically no progress has been made on the recruitment of faculty members during the past six months. The Participant training program stands exactly where it stood before the turn of the year, despite repeated efforts to bring the selection of candidates to a head. Presumably the inescapable logic of an early May deadline for enrollment in the Georgetown University English classes will bring the desired action.

The selection of Turkish staff for next fall has hardly begun. So far as teaching and research personnel are concerned, Dean Kadaster and Dr. Ali Aras are the only two committed. Presumably the authorities have some type of draft procedure in mind, because they do not seem at all perturbed at the situation.

- b. U. S. Staff -- As of the present time, the determination of U. S. specialists who can be effectively used at Ataturk University next fall is perhaps the most critical problem confronting the Nebraska Group.

Our Turkish colleagues on the Ataturk University Development Committee have stated quite clearly that their major needs for U. S. personnel are in fields such as chemistry, physics, geology, mathematics, and the like. Apparently, no Turkish docents and professors in these subject areas have any interest in going to Erzurum, and so personnel must allegedly be brought from the United States.

We, on the other hand, have taken the position quite strongly that our Nebraska Specialists should come to Ataturk University in fields like Animal Husbandry, Soils, Plant Science, Agricultural Engineering, Extension, and Library Science where we really have something distinctive to offer.

In any event, we have been unable to bring this matter into clear focus because of uncertainty as to the program of studies to be offered at Ataturk University during the first year of operation. This question will presumably be clarified by the forthcoming trip to Erzurum.

It should be added that ICA/Ankara has taken a rather firm stand that no Nebraska Specialist should be provided in any field at Ataturk University without assurance that a professionally competent Turkish counterpart will be on hand to work with him. The experience of those Nebraskans who have been without counterparts at Ankara University during the past few years lends real strength to this position.

We in Ankara are fully cognizant of the need for immediate recommendations to the Nebraska Turkish Committee if U. S. personnel are to be on hand in Erzurum by next November. We do not wish to act, however, unless and

until we have reasonable assurance that the Specialists requested will have constructive work to do when they arrive at Ataturk University.

7. Equipment

A dollars-account of \$154,000 has been set up in a New York bank for the current fiscal year, to be used by Ataturk University in the purchase of instructional equipment and materials. Before anything can be purchased, however, detailed lists must be submitted in advance to Washington, covering the items to be ordered.

Early last fall, we submitted a series of lists to ICA/Ankara, totalling \$105,500 but no action could be taken to develop a list for the remaining \$48,500 until a dean had been appointed for the Faculty of Agriculture. Now that Dean Kadaster has been named, the work can be carried to completion. Incidentally, however, the Turkish Foreign Office does not wish to proceed with the processing of any part of this \$154,000 program until the whole thing can be handled simultaneously.

REPORT

by

Harold L. Allen
Specialist, Extension and Information

This report covers the period at Ankara University, dating from October 1, 1957 to April 1, 1958.

I. GENERAL

More progress was made on the development of the Department of Extension and Information at the Faculty of Agriculture during the past six months than in the previous year. Several items were clarified, and definite steps were taken to implement the services of the Department to all other departments of the Faculty and to the Ministry of Agriculture.

I am more optimistic now than at any other time during my tour of duty in Ankara that the Department can and will become an organized unit which will stand on its own feet and provide the services which should be forthcoming from such a department.

II. SCOPE OF ACTIVITIES

A. Teaching - Faculty of Agriculture

During the Fall and Winter semester, 1957-58, a course in Extension Philosophy, Organization and Methods was conducted. Enrolled in the class were 218 seventh semester students. The course was required for all students majoring in General Agriculture, Agricultural Economics, Animal Husbandry, Agricultural Machinery, Field Crops, Agricultural Technology, and Horticulture.

This year more emphasis was placed on the Extension organization of the Ministry of Agriculture than in the course offered last year. Several guest lecturers were invited to address the classes. They included:

Akif Cakman, General Director of Agriculture, Ministry of
Agriculture
Davut Aris, In Charge, Extension Organization, Ministry of
Agriculture
Suheyla Teoman, In Charge, Home Economics Extension,
Ministry of Agriculture
Nurettin Madran, Director, Technical Information Service,
Ministry of Agriculture
Refik Kokal and Saadet Bozoglu, National 4-K Leaders,
Ministry of Agriculture
A. H. Imhof, Information Advisor, I.C.A. Agricultural Group

These people discussed the operations and services provided by the departments they represent and outlined the possibilities within their fields for students graduating from the University. In addition, Extension methods were emphasized to a certain extent, in that all of the guest lecturers told about the methods used by workers in their areas.

The remaining lectures were devoted to Extension Philosophy and Organization, with special emphasis on the importance of program planning and building, the use of local leaders in all phases of Extension, the advantages of having well-rounded programs for all parts of the rural population (men, women and children), and the processes involved when farm people accept new ideas.

A one hour weekly laboratory was conducted for each of the seven major groups represented in the class. In the laboratory, Extension methods were stressed, particularly mass and group methods. Equipment was borrowed from I.C.A. Agricultural Group for the purpose of demonstrations, and all students were required to prepare materials for use in Extension teaching.

The course was designed to be the first of a two-course series for the senior class. However, after the completion of the first course at the end of January, it was learned that the Faculty Senate had not acted on the request to have two courses which was presented in October. Thus, the students did not receive as much information on Extension Methods and Extension Program Planning as had been hoped.

Class attendance was better this year than last, although it still left much to be desired. Initiating compulsory class attendance on the part of Ankara University would certainly be a step in the right direction. More material could be covered in the same amount of time, in that less repetition would be necessary - a very important point in that the semesters are already only about ten weeks long. Also, the students would be exposed to much material that is now being presented but which the students miss by not attending the classes.

The importance of class attendance to the student is pointed out quite obviously in the following table. Of the 218 students enrolled in the Extension course during the fall and winter semester, 195 took the final examination in February and thus received a final grade for the course. The table shows the number of students that received each different grade, and the average number of lectures attended by students in each grade rank.

<u>Grade Received</u>	<u>Number of Students in Grade Group</u>	<u>Average Number of Lectures Attended per Student</u>
1 to 4 (failing)	22	2.3
5	32	4.9
6	61	5.6
7	63	7.2
8	15	7.6
9	2	9.0

In the Extension course this year, a modified grading system was put into practice. Instead of grading each student only upon the final written examination, additional factors influenced the final grade earned. The factors considered were: final examination (65 per cent); mid-semester test (15 per cent); laboratory assignments (10 per cent); and class and laboratory attendance (10 per cent). This grading system, which was announced at the beginning of the semester, could well have had an influence on the improved class attendance.

B. Steps Toward Establishing the Department

Early in the fall, several conferences were held in an attempt to reach agreement on who should head up the Department of Extension and Information. Dr. Cemil Calguner had been sent to the United States in 1955, under the University of Nebraska Program, to study extension and information programs for one year. It was thought that he would be placed in charge of the department's activities when he returned to Turkey in October, 1956. However, since his return, he has displayed no interest in the Department whatsoever, and finally in October, 1957, he was ruled out as a possibility for Department Head.

This left the Faculty in a rather embarrassing position, in that there was no one of sufficient academic rank to head up the Department, and there was an American specialist at the Faculty with no counterpart.

Additional conferences with certain members of the Faculty Senate were held, and out of these came a somewhat feasible plan of action which, if followed, could put the department into operation despite the fact there will be no full-time head of the department for quite some time.

Basically, the plan calls for the implementation of the following:

1. Mr. Orhan Kural, Assistant in Extension, to launch immediately upon his doctoral degree study and strive to complete this degree requirements by March 1, 1959.
2. Additional assistants are to be employed by the Faculty of Agriculture and assigned to the Department of Extension and Information. These assistants will work in the various areas of activity to be undertaken by the Department and also are to begin work on their doctoral degrees as soon as possible.
3. Upon completion of his Doctor's degree, Mr. Kural will immediately begin work on his Docent's degree, which could be obtained in two years' time. Under existing rules and regulations of the Faculty

of Agriculture, a person must possess at least a Docent's degree before he can teach in the classroom. Thus, if Mr. Kural completes his Doctor's and Docent's degrees as rapidly as possible, he will be in a position to assume the teaching load of the Department in March of 1961.

4. During the period of time when the assistants are progressing toward the sufficient academic standing to fully assume the duties of the Department, an American specialist will be employed to handle the classroom teaching and to provide training for the assistants in the various fields of activity of the Department.

Thus far Step No. 1 has been implemented. Mr. Kural has selected his topic for his Doctoral degree work, and it has been approved by the professors in the Department of Agricultural Economics, of which the Extension unit is currently a part. Personally, I am quite disappointed in the topic which was approved, in that the content of the thesis will be of little or no value to the Extension Service of the Ministry of Agriculture. However, Dr. Calguner, who is one of Mr. Kural's advisors, insisted on the topic and refused to discuss it with the American advisor. The thesis will give a resume of the Extension organizations in the United States, Germany, France, England, The Netherlands, Turkey, and other countries, and then will deal with the type of administrative organization some people outside of the Turkish Extension Service would like to see set up. The topic will be of no value to the people who need help the most - the Extension worker in the field. The original topic proposed was one that dealt with program planning on the village and county levels, but this was rejected by the professors in the Department of Economics.

In addition to the above four steps to be taken to get the Department into operation, six distinct areas of service have been outlined as possible fields of activity for the Department. Naturally, additional staff will need to be provided before all areas of activity can be entered into. The six are:

1. Instruction.
 - a. Undergraduate courses in Extension and Information.
 - b. Guidance in graduate studies in the fields of Extension and Information.
2. Visual Aids.
 - a. Equipment supply and maintenance pool.
 - b. Film library.
 - c. Preparation of visual aids of all types.
 - d. Instruction on use of visual aids.
3. Off-Campus Teaching.
 - a. Cooperate with Ministry of Agriculture in "in-service" training for Extension workers.
 - b. Coordinate activities of the Faculty staff in participating in subject-matter short courses, etc. in various fields in cooperation with the Ministry of Agriculture or other organizations.
4. Press and Radio Service.
 - a. Preparation and distribution of news releases for press and radio.

- b. Tape service for radio.
 - c. Picture service for news media.
5. Publications.
 - a. Provide editorial services for Faculty staff members in the preparation of technical and/or popular publications.
 - b. Maintain a photo library of prints and negatives which could be used in publications.
 6. Short courses and other on-campus activities.
 - a. Cooperate with the departments of the Faculty in arranging for and carrying out subject-matter short courses for professional workers and/or farm people. Such cooperation could include information programs, visual aids, hand-outs and programs, liaison work with other organizations, and follow-up.
 - b. Arranging for campus tours and field days.

Our work thus far has centered on the first three areas. In addition to the activities previously outlined (classroom teaching, in-service training, visual aids, Mr. Kural's Doctoral degree work), we have taken further steps to establish these services as a part of the Department's everyday activities. Most of the visual aids equipment which was ordered early in 1957, is now in Turkish Customs and is expected to be available for use at the Faculty in the near future. This will be a big help to us in getting our visual aids program underway. Also, a list of fifty (50) reference books was prepared and ordered for the Department library. Tahir Gogus, Acting Director of the Technical Information Service, has started his Doctoral degree work on the topic of Mass Media in Extension. In the very near future, a series of conferences will be held with the professional staff members of the Faculty of Agriculture to explain to them the possible services of the Department and the services which are already available. Several members of the Faculty staff are already bringing in manuscripts in English for editing before they are printed. This should be a big help in getting our services in the field of publications underway once we are ready to enter into this activity on a full scale.

Other American specialists at the Faculties of Agriculture and Veterinary Science are making a contribution to the Extension unit as well. During the current school year, several films have been obtained from the University of Nebraska Film Library and other sources, and the specialists are usually careful to point out to the staff that these films were made available through the Extension unit. This helps to point out to the staff some of the services which are and will be provided.

C. Extension Conference, Tehran

The University of Ankara Faculty of Agriculture was well represented at the Near East Regional Agricultural Extension Conference in Tehran, Iran, held from November 3 through 9, 1957. Miss Refika Dogan, Assistant in Home Economics; Mr. Orhan Kural; Miss Mary Rokahr, Home Economics Specialist; and the Extension and Information Specialist attended the meeting. Also in attendance were Nationals and/or American advisors in the field of Extension from Iran, Iraq, Lebanon, Libya, Jordan, and Turkey, and representatives of ICA/Washington.

The purpose of the conference was to provide an opportunity for the

conference delegates to trade ideas and experiences; to develop basic concepts and principles that characterize Extension education in agriculture and home economics; and to have the directors of Extension develop policies that could serve as a guide to the directors in planning and carrying out a program to encourage nearly every farm family in the country to practice the solutions to a single fundamental problem.

In my estimation, the conference was quite successful in meeting these objectives. Those of us from the Faculty of Agriculture certainly got a closer look at, and a clearer understanding of the Extension movement in the Near East as it is today, the problems it is facing, and its goals and objectives for tomorrow.

It was interesting to note that Turkey is the only country among those attending the conference that currently is offering any pre-service training for Extension workers on the university level. In this connection, the directors of Extension from the countries represented requested that much thought and planning be given to the establishment of a regional training center for Extension workers. Their current thoughts now center on a training unit to serve potential county workers, who for the most part lack the necessary qualifications to enroll in a university. However, the future does foreseeably hold a need for training more university people in the field of Extension on a regional basis. The University of Ankara Faculty of Agriculture should be in an excellent position to fulfill this need if it continues to develop its Department of Extension. However, the development of the Department as rapidly as possible is essential, since other universities, notably the American University of Beirut, are being cited as possible locations for such a training center.

(A special report on the Tehran conference was submitted to the Dean of the University of Nebraska Group in Turkey on November 29, 1957.)

D. Cooperation with I.C.A. and the Ministry of Agriculture

1. Training Seminar for Provincial Agricultural Directors.

In mid-December, a one-week training seminar was held for about 40 provincial agricultural directors. The conference was held in Ankara, and the material covered was similar to that which had been presented at the summer courses for county agents. (See second six-month report.)

The Extension and Information specialist participated in the course by presenting lectures on method and result demonstrations and how farm and village people accept new ideas.

2. Training Seminar for Ankara Province Extension Workers

In February, a one-day training course was given for the Extension workers in Ankara Province at the Faculty of Agriculture. Mr. A. H. Imhof arranged the program and requested that the Extension and Information specialist present material on demonstrations, which was done. Many of the people in the meeting had attended one of the two-week seminars held last summer, and reported on how they were making application of the ideas they had picked up during the course. It was most gratifying to hear their reports.

3. Home Economics Extension Training, Bornova (Izmir)

Also in February, three days were spent in Izmir teaching at the Extension Home Economics Institute at Bornova. Topics covered there were home-made visual aids and posters, demonstrations, program planning, and how farm and village people accept new ideas. Also, considerable time was spent with Miss Helen McCune, Home Economics Advisor, in discussing the future of the school and plans for expansion.

4. 4-K Activities

a. During the past six months, numerous 4-K committee meetings were held to discuss the progress being made in this program. Much time and thought has been given by the committee members on ways the program can be improved in 1958. Of primary concern is servicing the 4-K groups, members and leaders. The experience gained in 1957 will be most valuable, and it is hoped that 1958 will see improvement. One statistic which bothers the committee considerably is the fact that only 62 per cent of the members successfully completed their projects in 1957. This figure seems quite low, and it is evident that more personal service will need to be given the 4-K groups in the coming year.

b. In October, the first round of 4-K Achievement Days were held in the provinces where 4-K was organized in 1957. At the request of the National 4-K Leaders, the Extension and Information specialist attended and participated in Achievement Day programs in five villages in Kocaeli and Kirklareli Provinces. It was most gratifying to see the accomplishments of those 4-K members who had completed their projects. The project work was of excellent quality, and the effect the work was having on the parents was already evident. For the most part, parent interest was good. However, I was concerned about the members who had not completed their project work. The basic reason for this I believe was lack of leader training and understanding on the local level of just what was expected of the member. At each of the villages, small awards were presented to the members who had done exceptional work. For the most part these awards were practical things that could be used in connection with future 4-K projects, i.e., watering cans, poultry feeders, purebred chickens, bee net and smoker, clothes iron, etc.

5. International Farm Youth Exchange Program

At the request of Howard Akers, Agricultural Attache, I became a member of the I.F.Y.E. committee to select the two people who would go to the United States this summer under the I.F.Y.E. program. Two meetings were held to select the individuals. Fourteen young men had applied, and the two selected were Cevval Sirencioglu of Bursa Province and Maummer Leventler of Ismir Province. Both young men should do a good job of representing Turkey, and at the same time should bring back many impressions that will forward the friendships between the United States and Turkey.

6. Other I.C.A. - Ministry of Agriculture Activities

In the past six months, numerous meetings have been attended during which the following topics have been discussed. No definite steps have been taken to implement the programs in all cases, but the groundwork is being laid:

- a. Summer training courses for county agents. Five two-week courses have been proposed, three to be held at the school in Amasya and two in Bursa. These courses would be similar to those held last summer.

- b. Training seminar for Extension information workers. It has been proposed that this seminar be held from June 15 to 30.
- c. Conference of Provincial Agricultural Directors. It has been proposed that the Provincial Agricultural Directors meet in Ankara from October 2 through 11. At this meeting, Extension policies and programs are to be discussed, and training provided in certain specific areas of Extension programming and administration.

E. Field Trips and Visits

In connection with the trips to Bornova, Kocaeli and Kirklarel, the following visits were made:

1. Cayirova Agricultural School. At the school we observed the work being done with poultry and in fruit and vegetable production. We discussed the teaching program with the director of the school and some of his staff. They were particularly interested in including some Extension methods in their school program.
2. Provincial Agricultural Director, Edirne. The director wishes to discuss the material covered at the short courses held during the summer. Some of his agents were attempting to put program building into operation, and the director desired more information on it so that he could better assist his field staff.
3. Ege University, Izmir. At the university, we toured the printing plant (quite modern and doing some excellent work), and the poultry improvement plant, where they are currently expanding their hatching facilities.

F. Personal Trips

Several short drives were taken out from Ankara in all directions to observe farming operations in progress. In addition, a week-end trip was taken to Konya with the Blunn family.

III. GENERAL OBSERVATIONS AND RECOMMENDATIONS

As was stated in the beginning of this report, I am more optimistic now than at any other time about the future of the Department. However, we should not be too confident that the job will be done easily or quickly, because in reality, it is just getting started. The development of the Department is going to depend wholly upon cooperation between the staff of the Department, the Faculty Administration, and the other departments of the Faculty. Each one will have to do his share to make the Department successful.

The staff of the Department will have to achieve the academic standing in the allotted time if the Department is to become functional by the aforementioned dates. The staff will have to provide the services as outlined if the Faculty is to gain the confidence of the Department and make full use of it.

The administration will need to provide the necessary man-power and equipment if the Department is to provide the services. They will also need to assist the Department in getting the Extension and Information courses put into the Faculty

Curriculum if the students are to receive pre-service training in these fields. And the administration will need to clarify to the rest of the Faculty the role of the Department in servicing the Faculty as a whole.

Other departments of the Faculty will need to utilize the services provided if the Department is to become functional. This will have to be done through cooperation, since it is impossible to force anyone to take advantage of services provided.

Thus, through cooperation and hard work, the Department of Extension and Information can and will become an established part of the Faculty of Agriculture which will be of benefit to the Faculty staff, the students, and to the people of Turkey.

REPORT

by

E. C. Conard, Specialist
Range Management

This report covers the period of work at Ankara University, May 22 to November 22, 1957.

WORKING CONDITIONS AT ANKARA

Working conditions are the same as previously reported.

SCOPE OF ACTIVITIES

Research Work Crop rotation studies:

Considerable time was spent in developing the work plans and initiating the field work for two research projects. One project is a study of crop rotations using annual forage legumes and commercial fertilizers in the production of wheat. The second is a study of the value of two perennial legumes, alfalfa and sainfoin, in the production of wheat. Since wheat is the major crop in Central Turkey, it appears advisable to study the possibilities of producing supplemental forage in the wheat cropping system.

A topographic map of the area was prepared. Four blocks (replications) were located in different parts of the field so that the plots would be on the approximate contour. The field was in summer-fallow in 1957. Wheat and the annual legumes, Pisum arvense and Vicia narbonensis were planted in October. The perennial legumes will be planted in April, 1958.

Phytometer studies:

Eighteen metal phytometers, 20 cm. diameter by 65 cm. deep, were obtained. Grasses were started in the phytometers in September in the greenhouse to study the effects of different intensities of foliage removal on root development. This is

similar to work done by Dr. J. E. Weaver at Nebraska, but with different species: forage grasses important in Turkey.

These phytometer studies will give new information of some scientific value. But of equal importance, they will provide colored slides and plant materials that will be of great value in teaching, and pictures that can be used in published reports and translations.

A "Suggested Work Plan for the Study and Demonstration of Methods of Improving Natural Grazing Lands" was prepared for Mr. Sefik Iyibilgin of the Ministry of Agriculture. This is a simple plan for comparing reseeding with grazing control systems in the improvement of native vegetation. The experimental plots can be used to demonstrate the effectiveness of the various practices to farmers and administrators. The study is designed to be conducted on village common lands.

Conferences

Only one formal conference was attended. I went to Istanbul in September as a member of a team to inspect the Forestry School of the University of Istanbul and to make recommendations concerning the request from the Forestry School for assistance from ICA. We found the School well staffed with capable, well-trained men. All the professors have had three to five years' training in one or more of the European Forestry Schools. Many of the assistants have studied in Europe, too. The School does need certain equipment to facilitate teaching and research.

Several informal conferences have been held with co-workers in ICA, and with men from the Ministry of Agriculture and the Faculty. Assistance has been given in the identification of plants collected by the various workers in the Ministry, and in preparation of work plans, etc.

Teaching

There has been no formal teaching during the period, except to complete the semester and give the final examinations in early June.

Some work has been done on lectures for the coming semester. Also, on the condensation of certain technical articles to be mimeographed or printed and used for reading assignments. One of the major problems is the reproduction of illustrations. There are many technical articles that should be condensed, translated into Turkish, and then printed or mimeographed. However, much of their effectiveness is lost unless the illustrations can be reproduced. Pictures reproduced from printed pages generally are not satisfactory, because much clarity and detail are lost in the process.

Field Trips

One field trip was made to the Eastern Mediterranean Region in June. Approximately five days were spent in the area with Mr. Fuat Gulyasar, District Forage Crops Specialist. Visits were made to:

1. The farm of Mehmed Can Eliyesiz, who is particularly interested in producing forage grain and legume seeds;

2. The Tarsus Irrigation Station, to observe irrigated pasture trials and grass and legume adaptation tests;
3. Alata Technical Gardening School, to confer with the Assistant Director concerning revegetation of forested grazing land; and,
4. A native pasture on Common Land east of Ceyhan where Fuat Bey has a study area fenced to exclude livestock.

Several short trips were made to study the vegetation on native grazing lands near Ankara, and to obtain plants for further study.

REPORT

by

Robert L. Fox
Specialist, Soil Science

This report covers the period at Ankara University, dating from September 1957 through February 1958.

Work has continued on the activities outlined in the first two reports. These can be listed as follows:

1. Research in the laboratory, field and greenhouse of a routine nature.
2. Training assistants.
3. Organization of equipment.
4. Developing cooperation.
5. Teaching.
6. Field trips.
7. Research of a basic nature.
8. Helping develop plans for research projects in plant nutrition.
9. Writing.

The amount of time devoted to these various activities change from time to time. In general, during the school year, November 1 - June 1 (except the month of February) approximately one-half time is devoted to teaching. The other one-half is mostly taken up with work in the laboratory and greenhouse. Only a small amount of work time has been devoted to writing.

Progress in the various areas will be discussed in the order given:

1. Research directed toward the calibration of chemical soil tests with crop

response to fertilizer under field and greenhouse conditions was continued on a somewhat larger scale than the previous year. Sites for field plots were selected during the month of September. Eight large (17 treatments x 4 replications) experiments were established as follows:

- a. Eskisehir Experiment Station. This location has a volcanic soil testing relatively high in phosphorus but low in nitrogen. The calcium carbonate content is almost zero. One experiment (fallow) was established at this location.
- b. Kocas State Farm. Two very different soils were selected. One was a terrace soil derived from silty material brought down into the salt lake basin by a small river. The second was a soil developed on more recent, coarse textured, alluvium at a lower elevation. Two experiments were established on the terrace soil. One was on fallow and the other was wheat after wheat. One experiment (fallow) was conducted on the low soil.
- c. Malya State Farm. Two soils were selected. One was derived from limestone and the other is believed to be local loess. These two locations are about 12 Km. apart. Two experiments were established in adjacent fields at each location. One of these was on fallow land and one on wheat after wheat. The loess soil has much higher nitrification rate.

Some difficulties were encountered in this work. At every location the grain drills did not operate as they should. In the future, it may be best to use larger phosphorus plots and split these for nitrogen. In this way it will be possible to use large equipment which is more likely to be in a good state of repair. Another possibility is to use smaller plots with a more simple design which can be established with hand equipment.

The plan of these experiments and the treatments used were given in the first six-month report.

In addition to the eight large experiments, four small combination research-demonstration plots were established on village land using hand equipment. Plots were established at Bolu, Kacarli Koy, Erymann Koy and near Cubuk. These experiments have only five treatments: NPK, NP, NK, PK, and check. They are replicated four times. These plots will be discussed further under item 4, "Developing Cooperation".

Soil samples were secured from the various experimental locations and other locations for greenhouse tests, using lettuce as the indicator plant. These tests are in progress at this time so that only general statements can be made. Some soils support excellent growth of lettuce when nitrogen and phosphorus are supplied. The Eskisehir and Bolu soils are excellent in this respect. These soils are low in CaCO_3 and probably are higher with respect to primary minerals than some of the other soils tested.

Some soils do not give satisfactory lettuce growth even when NPK are supplied. Soils from the Black Sea Region are among this group. These re-

sults suggest the deficiency of some nutrient other than nitrogen, phosphorus or potassium. Work is beginning along this line.

Samples of soil from the various locations have been used in the laboratory testing program. One new test, nitrification rate, has been instituted. The samples, in general, give higher nitrification rates than would be expected. Only a few samples give very low nitrification rates according to the classification of Iowa State and Nebraska.

Samples have been secured for measuring leaching during the period of winter rainfall. This has been a season of ample (even excess) rainfall at some locations. Nitrates have been leached as much as one meter into the soil. This may be sufficiently deep so that the wheat plants will not be able to utilize it for maximum yield. It should be available for making high protein wheat, however.

2. Training for assistants has continued since they are actively engaged in helping with the project work. No new methods have been demonstrated except nitrification rate procedures. I have attempted to give them more responsibility in such matters as calculating data, etc. Burhan Bey has joined me in working on a basic research problem. Sevim Hanim has been assigned a problem dealing with some possible minor element (also Mg and S) problems which have come out of the greenhouse testing program.

3. Equipment for the nitrification rate test has been organized.

4. Cooperation has been developed with Toprak Ve Gubre. Since Dr. Gardner has left, I have been asked to consult with the laboratory. The small research-demonstration plots grew out of this cooperation. Cooperation with the regional agricultural directors was necessary in setting up these small plots. We were given the willing help of the local agents and the farmers concerned. As far as we have been able to determine, the plots have not been harmed except for missing stakes at one location.

5. Teaching has continued on two fronts. A seminar continues to be presented for two 45-minute periods each week. This has been attended mostly by personnel from the Ministry of Agriculture. Attendance varies between 10 and 25.

A two-semester class (plus laboratory) is being given in Soil Chemistry. An attempt has been made to give a good laboratory with this course. The students have been divided into groups so that they will learn to work together. When an analytical procedure is being taught, each group is assigned a different soil. In this way they learn to compare soils, to see the effect of cultural practices or to see variations within a soil profile. As an example, when studying the method for determining soil nitrates, each group was given a sample from a different depth in the soil profile. One set of samples was taken in the fall; a second set was secured in the spring after leaching by the winter rains. Thus, when the determinations were made and the data collected and summarized before the entire group the student couldn't help seeing the distribution of nitrates in a fallow soil and the movement of nitrates downward with the water.

As a result of this teaching experience, I have put down a few observations and suggested solutions which are included as appendix to this report.

6. Field trips. In addition to the trips scheduled for field plot work, one extensive trip was taken in February. The area visited was to the south and east of Turkey and some countries of the Middle East. Minor element deficiencies of citrus were noted in almost every grove seen in Turkey. Soil samples were taken at six locations for future greenhouse work.

7. Research of a basic nature has continued on the solubilization of soil phosphorus of plants. There is a marked difference in the amount of phosphorus taken from a calcareous soil by various plants, and good evidence that some plants, especially Korunga, will make phosphorus available to succeeding crops.

This work has demonstrated the possibility of some minor element deficiency in the soil being used (Ankara Experiment Station). Lettuce made little growth after the soil had been cropped for six months by other crops even when nitrogen, phosphorus and potassium were supplied.

Further work is in progress on this topic.

8. A research problem on minor elements has been assigned to one assistant. Assistance with a problem on root development has been given another.

I have tried to interest the Field Crops Department in obtaining soils data on a long-time rotation being set up. So far this effort has been in vain.

9. One research bulletin has been written for Missouri. Work has moved forward on one for Nebraska.

I have given aid in writing to members of several departments including Animal Husbandry, Crops and Soils.

Report

for

September 1, 1957 - February 28, 1958

Fred F. McKenzie
Specialist, Artificial Insemination

Teaching:

1. Seventh semester veterinary students (54) were offered a course in Livestock Fertility. Interest has been high. However, assertiveness on the part of the student body was demonstrated in outspoken refusal to take a mid-semester quiz. It is true that such is an innovation in this department (Zootechnic Institute). The docent in charge 1956-57 tolerated the practice but warned the results could

not be used in computing the final grade. This year the above incident was discussed with the head, Professor Batu, who expressed regret but recommended that the final examination be the sole basis for grading the students. There is agreement that one or two quizzes a semester have real teaching value and the practice will probably be instituted even though this year's attempt was resisted.

2. Short Courses in Livestock Fertility and Artificial Insemination. Twenty-five (25) veterinarians from six (6) haras, three (3) cattle stations, and several other centers attended February 4-14, (inclusive), 1958, this course. Emphasis was on material useful to these men in the immediate future. It was appropriately held on Cifteler Hara where 174 cattle were on a feeding trial, and where everybody was comfortably housed and well cared for.

This type of activity on the part of Ankara University should be encouraged and the public made more and more conscious that suitable training courses can be arranged on request.

The above effort was a good illustration of cooperation between the University, the Ministry of Agriculture and I.C.A.-University of Nebraska.

3. Graduate counselling has continued and there has been genuine acceptance that a thesis project must be well planned in advance of the work to be done, and that its prosecution must benefit alike the student, the University, the Ministry of Agriculture and the local agency providing the animals and the many facilities. This specialist has promised to continue counsel by correspondence through his counterpart-interpreter to students whose programs have been designed and initiated during 1956-58. One illustration: Mr. Adnan Ozcan has undertaken the study of bull semen at each of the seven established haras scattered over Turkey. This will result in learning the potential fertility of cattle (1) in the chief cattle areas, (2) at each season of the year, and (3) of the several breeds maintained. Moreover, the work will involve the cooperation of cattle supervisors at each station, and if he does it well, should establish him as the leader in this specialized field, and in a relatively short time. He already has been chosen to head the Ministry's research program in the fertility of bulls and semen preservation.

Research:

My recommendations on research for this department made in my first six-month report still stand.

The two rooms assigned for research on frozen semen have remained unused. Materials have not been found as yet to complete the 5° Centigrade room. The Nebraska University-I.C.A. equipment ordered a year ago lies in the Turkish Customs Office awaiting clearance. It is urged that the Ministry of Education be helped to develop a policy or understanding with Customs officials that materials and equipment being imported for teaching and research are for the Country's welfare, are not for resale or commercial use, and to expedite their entry is to the advantage of all.

Training Assistants:

Dr. Afif Sevinc, Assistant in this department, has continued to be my interpreter counterpart. His enthusiasm for this field has grown, although always high. He should be encouraged in his training program, even to having a well-planned year in America.

Lack of equipment has prevented the initiation of research projects planned in the semen preservation field.

Consulting Work:

This has been with Ministry of Agriculture officials, including personnel at the haras and cattle stations.

Professor Selahattin Batu, Head of this department, and Mrs. Batu accompanied Mrs. McKenzie and myself on an automobile trip in October through Konya, Antalya, Izmir, Canakkale, Bursa, and Eskisehir, visiting haras, cattle stations and Ege University enroute.

One observation was of personal interest. The dean of agriculture of Ege University was most vocal on the good that has resulted from the importation of Holstein cattle in the Ismir area. These were brought here in the 1920's by International College, an American institution for boys, in which this specialist was head of the program in agriculture 1927-28.

On many occasions my research and extension philosophy has been the topic of discussion with local leaders. One example will suffice. The director of the Kumkale Cattle Station (near Canakkale) was expounding on how he avoids conducting any experimental trials in which the farmers might find disagreement or which might be at variance with traditional practices. I urged him to plan and conduct comparisons, and let the results be objective and speak for themselves. Farmers are reasonable and appreciate the government showing leadership and offering guidance in how they can improve their practices and make more money, or operate at lower costs.

Other institutions visited were: Boztepe Cattle Station (near Antalya), the School for Veterinary Assistants, and the Ferriers School, and the adjoining Artificial Artificial Insemination Center - all three at Istanbul.

Food and Agriculture (I.C.A.)-Nebraska University Cooperative Efforts:

During the last six months the livestock and poultry specialists (I.C.A.) have met monthly with Doctors Simms, Blunn and myself. This has been healthy and helpful. There is much to do, and having a clear idea of what each is undertaking has eliminated any strain and avoided misunderstandings. Then, too, we have been able to complement each other's work on occasion. The help and counsel of Dr. B. T. Simms has been invaluable to all of us, and to the program.

Reference was made in my first six-month report to the working committee set up to implement the Ministry-I.C.A. agreement for Livestock Improvement in Turkey, and my high hopes for results here. It is disappointing to report no progress except some extra-committee efforts of Mr. F. A. Ralston on cattle importation. It seems that the committee's program is stalled awaiting the report of its sub-committee on Registration of Purebred Livestock in Turkey. It is hoped the apparent stalemate here can be resolved forthwith and that the main body can move to matters of real import to the Country.

Ataturk University:

The committee for development of this new institution has included me for the first time. My concern has been with the animal science curriculum, the use of land, livestock for instructional purposes, and the design and provision of livestock shelters suitable to this area. Practically all of these subjects involve quite different or new concepts to those held by the Turkish members of this committee. If the "Land-Grant University" philosophy is to become established here and prevail, much careful and persuasive work lies ahead. I have been most favorably impressed by Rector Ozel's forthright handling of matters and especially by his willing acceptance of suggestions in this animal field that is admittedly entirely strange to him. Much credit must go to the patient and diligent performance of Dean Hoiberg and Dr. Schneider as I have seen them operate in this committee.

Miscellany:

A request was put forward through Dean Hoiberg for translation into Turkish of suitable textbook material urgently needed to carry on good instruction in Fertility and Artificial Insemination.

It is to be noted that there is a fine working relationship between the Veterinary and Agriculture Faculties as evidenced by the arrangement whereby Professor Sedat Kansu (Animal Nutrition-Agriculture) will take over for one and one-half years the teaching responsibilities of Docent Sabri Dilmen (Animal Nutrition--Veterinary) while the latter is on leave in Europe.

Help has been solicited by Turkish colleagues and gladly given on the English in manuscripts being offered for publication.

Assistance has been given on the design of an office-laboratory layout and livestock quarters for the proposed Zootechnic Institute building.

As the result of an interview with me a feature article appeared in the 122nd anniversary brochure of the Turkish Veterinary Society. Topics spelled out included:

- The need in Turkey for companion programs (a) Sire Finding and Proving and (b) Artificial Insemination;
- A working relationship in these fields with Ankara University and the Ministry of Agriculture;
- Attractive presentation of class material and student attendance;
- A proper balance in lecture and laboratory and practice work including ready access to University owned animals allowing frequent observation of the livestock;
- A year's graduate work in one's specialty terminating in a degree such as our M.S.;
- Great progress made since 1928 should constitute a basis for pride and faith in the Country's future;
- The exchange of ideas between the Turkish and American peoples is bound to develop a mutual regard, each for the other, and to result in gains by both nations.

Finally, the wisdom of the administration in drawing my contract setting forth formal relationships with the Veterinary and Agriculture Faculties and the Ministry of Agriculture, continues to be appreciated. I shall always be grateful for the privileges and the opportunities afforded.

Report

by

W. W. Ray, Specialist
Plant Pathology

This report covers the period from July 1, 1957 to January 1, 1958.

During this fall semester, one trip was made to the Adana-Mersin area and time was spent working on lecture materials and with my assistant on his research on diseases of vegetables. My liaison work between our Nebraska office and the College of Agriculture has been sporadic and not in total particularly heavy. Each week I attend a conference with the Agricultural Group of I.C.A. and the regular meeting of the Ataturk University Committee.

The staff problem in the area of plant pathology in the Department of Plant Protection at the College of Agriculture has rapidly become serious. The one docent, capable of carrying on when I leave, has been called into military service for two years. The only candidate for a docentship has just left for a position in the laboratory of the sugar beet industry in Eskisehir. This leaves one doctoral student who has completed but one year's work. He is my assistant and will do my interpreting in lectures and the laboratory assisting in the two courses to be given in plant pathology. Prospects for lecturer for the next two years are dim.

An order for several thousand dollars worth of laboratory equipment and supplies has finally been placed. It is sincerely hoped that this equipment will arrive before my departure from Turkey in July so that I may assist in setting it up and in giving some instructions in its uses to some of the staff and students.

Plant Protection Institutes at Samsun, Adapazari, and Adana were visited in the summer and autumn. An attempt to visit the pistachio research station at Gaziantep was thwarted because of military and political problems in that region.

In general, these three institutes had adequate quarters but lacked sufficient equipment and library facilities for satisfactory research. The staff in plant pathology was always one-third to one-half as large as that in entomology - a poor balance. It was a pleasure to discuss some of the problems the men were investigating, and I was able to offer suggestions that appeared to be acceptable and helpful to them in some instances.

In the Samsun area the principal crops surveyed were tobacco, corn, hazelnuts, and fruits. Lack of moisture was hurting some crops, and poor orchard practices coupled with lack of fungicides had resulted in several disease problems, principally scab of apples, shot-hole of plums and apricots, brown-rot of peaches and other stone fruits, and mildew of peaches and grapes.

The principal crops of the Adapazari area are potatoes, sugar beets, tobacco, and fruits. No work is done on diseases of tobacco and sugar beets by the Plant Protection Institute in Adapazari, since these are investigated at special institutes in Istanbul and Eskisehir, respectively. Considerable work is done on fruits along the line of control of brown-rot, shot-hole, silver leaf, and virus diseases. The big problem on sugar beets is Cercospora leaf-spot. It is thought by those in the local sugar factory that the presence of this fungus, often devastating to the foliage in the few months prior to harvest, greatly reduces the sugar content of the beets. Fine potatoes can be produced in this area, but "running-out" is a major problem. A plant breeding station in Adapazari is concerned with this potato problem, and among other things a satisfactory area in Turkey for seed production is being sought. A serious disease of chestnuts and a deficiency problem of stone fruits are being investigated in nearby Bursa by personnel from Adapazari, and I shall make a trip to this area in the coming spring. At the same time the research station for sugar beet problems will be visited in Eskisehir.

The principal crops examined in the Adana area were citrus and rice. In citrus, deficiency problems and the Deuterophoma disease were the important ones seen. The big problem of rice is the Helminthosporium disease. This area produces large quantities of vegetables, but it was in between growing seasons when the area was visited.

Several trips during the spring and early summer are being planned. It is hoped that I may be of assistance to plant pathologists in their investigations.

Of course, lectures will be translated and mimeographed for use as a student textbook, inasmuch as none exists at the present time. The lectures on general plant pathology are now complete, and the lectures on diseases of field crops are being written.

Report

by

Mary Rokahr
Home Economist

This report covers the progress towards the establishment of a Home Economics Department in the Agricultural College, University of Ankara, during the period, July 1, 1957 to January 1, 1958.

In the previous reports, a division was made between Part I, "Progress towards specific objectives as listed in the basic project," Part II, "Progress made by Mary Rokahr, Home Economist, to aid in the establishment of the four-year course," and Part III, "Plans for the next six months." In this report, Part I and Part II have been combined.

PART I

1. Curriculum - Establishment of a Home Economics Major.

During the summer and fall, a number of students made inquiry on enrollment

in Home Economics or plans they could make for entrance study until the department was established. As a result of these questions, Refika Dogan and I undertook an analysis of the proposed curriculum for Home Economics and compared it with the majors being offered in the Agricultural College. The findings from this analysis were incorporated in a memorandum dated October 15, 1957, sent to Dean Izmen, Dean Hoiberg, and Orhan Duzgunes, who has been acting as interpreter and counselor to the Home Economics Department in Dr. Ozbek's absence.

The findings from the study indicated that students who wished to enroll in Home Economics might consider other colleges of the University of Ankara or the Agriculture Technology Department of the College of Agriculture, but that it seemed best to recommend that a cooperative plan be developed with the Agriculture Technology Department.

Orhan Duzgunes, knowing and understanding the organizational pattern within the College of Agriculture, recommended that instead of developing a cooperative curriculum with Food Technology that a major in Home Economics be established. Dean Hoiberg recommended this procedure to Dean Izmen, who is acting head of the Home Economics Department in Dr. Ozbek's absence. The matter has come up for consideration in the Executive Committee of the Senate Faculty, and there seem to be advantages and disadvantages to the plan with some professors in favor and others against it. In order to clarify the situation, a series of conferences have been held with key members of the Senate Faculty and professors with whom the Home Economics Department will be having cooperative courses. We hope through these visits that a sound groundwork has been laid so that whatever decision is finally reached, it will be one that will best suit the needs of potential Home Economics students.

Advantages to establishing a Home Economics major are related to the fact that during the first year at least, the students need not take specialized Home Economics courses but will be taking courses in the fields of physical and social science. If the students could be enrolled in class work in September, 1958, they would have worked one year towards their degree by the time there is need to study specialized Home Economics courses. It is hoped by March when the budgets are decided that we will have assurance that funds will be available both through the College of Agriculture budget and I.C.A. to start the building. To start the Home Economics building it has been estimated that approximately 200,000 Lira will be needed from each source.

In general, the professors who think that it would be best to wait another year or more before establishing a Home Economics major do so because they say we do not have the staff or the building to offer the specialized Home Economics courses. This, of course, is correct. As was stated above, the curriculum can be organized so that Home Economics freshmen can take the physical and social sciences which would probably be given off the campus, or the students would enroll in courses being given on the Agricultural campus. Some of the professors feel that there is not enough staff or classroom space to take care of an added enrollment of Home Economics students on the College of Agriculture campus.

The Home Economics Extension Service is asking us for more help in training their staff. They prefer to develop the program at Ankara rather than to continue the development at Izmir. Establishing a major in Home Economics will be helpful in all these contacts and the development of such courses.

2. Home Economics Staff.

Refika Dogan. Refika Dogan was unable to go to the United States for work towards her Doctor's degree in September, 1957, because the funds on the University of Nebraska-University of Ankara program had been exhausted. Dean Hoiberg has been able to find funds so that Refika is leaving for the United States in January, 1958, and will be enrolled probably at the University of Nebraska for graduate work in the spring semester. Refika Dogan is planning to major in child and family development, but if Dr. Sahinkaya has decided to make this her major, Refika will major either in clothing and textiles, home furnishings and equipment, or institutional management.

Ayse Erkut. Ayse Erkut is continuing her studies at Manhattan, Kansas, working on her Doctor's degree in food and nutrition and seems to be making good progress.

Suat Kundak. Suat Kundak will probably be able to complete her Master's degree in June, 1958. The Home Economics Extension Service, through Suheyila Toeman, is cooperating with Suat in collecting data from twenty-five (25) village and twenty-five (25) city homemakers on the use of their time. Considerable time was spent in reviewing this survey with the Extension staff and a major change was suggested, namely to collect data on time used by Turkish village homemakers in agricultural production as well as homemaking.

Dr. Rezan Sahinkaya. Dr. Rezan Sahinkaya was expected back in Turkey in October, 1957. Because she had a baby in November, she did not return to Turkey until December, 1957. She plans to report for duty about January 15, 1958.

3. Three Years Extension of University of Nebraska-University of Ankara Department of Home Economics Project.

Dean Izmen requested from the Home Economics Department a statement on a three-year extension of the Home Economics project with the University of Nebraska. A number of conferences were held regarding this matter, and it was finally decided to request

- (A) that Ayse Erkut's and Suat Kundak's scholarships be extended for six months and a year, respectively, so that they might remain in the United States and secure their Doctor's degrees;
- (B) that Refika Dogan be sent for a two-year period with the hope that her stay might be extended so that she, too, could secure her Doctor's degree in the United States;
- (C) that the United States be requested to send to Turkey a staff person for a three-year period to complete work in guiding and developing the Home Economics Department;
- (D) that two Home Economics subject matter staff be sent to Turkey for two years each as soon as students are enrolled and the building and equipment is ready for classes to teach in the areas in which such teaching is needed.

4. Budget.

A yearly budget of 6,000 Lira has been included in the Agricultural College budget for the Home Economics Department for current needs. This amount has been ample so far.

Plans for financing the Home Economics building have also been included in the Agricultural College budget. It has been recommended that 200,000 Lira be appropriated each year for the next few years with a similar amount to be allocated by I.C.A. from counterpart funds until the building furnishings and equipment have been completed.

Conferences have been held with I.C.A. Education and Agriculture staff by Dean Hoiberg regarding the I.C.A. cooperative financing of the Home Economics building.

5. Home Economics Library.

There has been little change in the Home Economics Library except for the cataloging of the books and filing of hundreds of U. S. bulletins. Eleven (11) Home Economics textbooks of college level have been received that were purchased through University of Ankara, College of Agriculture, funds. Thirteen (13) more are on order which we hope to receive during the next six months. Ninety-two (92) books covering various phases of Home Economics and education comprise the present library.

6. Teaching.

Izmir Home Economics Extension Short Course. The Home Economics Extension staff arranged for a two week in-service training conference for fifteen (15) Home Economics Extension workers who had been on the job a year to two years, and twelve (12) Home Economics teachers from the agricultural and homemaking middle schools. I was asked to give lectures on Home Management. These lectures, together with daily assignments to students, covered Home Economics-Home Management - what it is; time management; money management; work simplification; and housing improvement. The lectures were prepared in Turkish and every student received a complete set of the lecture notes. (See memorandum dated September 18, 1957, for details.)

Later Refika and I prepared in rough draft a circular on washing dishes and also provided the Extension Service with a visual aid on the family cycle.

Home Economics Philosophy and Content. This course was given in the spring term to juniors and seniors of the Agricultural College and was completed and reported on in the last six months report. It was necessary for Refika and me to give a make-up examination (a system that Turkey uses) for six students who had failed or had not taken the examination in June. Two students who had failed, passed, and four students took the examination for the first time and passed.

Kiz Institute. Forty (40) students and three (3) staff members from the Kiz Institute who were training for adult homemaking work in villages asked for an explanation of Home Economics and the proposed Home Economics college course. The lecture was given outdoors in a lovely spot on the campus last summer using charts and other visual aids.

Training of Home Economics Extension Workers. As a result of the course in Home Economics Philosophy and Content, eight (8) women students wanted to do Home Economics Extension work. Considerable time was spent with these eight students securing data concerning their background and interests and arrangements were made for Suheyila Toeman, in charge of the Home Economics Extension Program, to interview them. We tried to arrange summer work with the Home Economics Extension Service for these students. Because of rulings which I did not understand, we were unable to place any of the students this last summer. This first attempt need not be considered an entire failure because next year we will be able to work out plans in advance and be cleared as to what we are able to offer students.

Ege University. Ege University requested that a Home Economics staff person give a course or courses in Home Economics at Ege University this fall. This matter was discussed with Dean Hoiberg and Turkish staff members, and it was decided that it would be impossible to help Ege University this fall because of our limited staff.

Bahriye, who is a member of the Ege University staff, has been given help in developing a list of books for a Home Economics library to be purchased by Ege University.

7. Home Economics Building.

Real progress has been made in the development of the plans for the Home Economics building. At least six conferences have been held with the architects, Kadri Kalaycioglu and Vedad Yalcinkaya, Paul Weigel, Refika Dogan, Orhan Duzgunes, and others concerning the over-all plans for the building. Some changes have been made but none of them of major significance.

The architects' contract reads that they must present the first general plan one month after being awarded the contract. More detailed plans must be presented sometime during the next forty (40) days and then following another three-month period, the plans are to be completed. We are now in the third stage of these plans.

General equipment lists had been developed before the architects competition was held. In the last six months, we have developed the detailed lists of equipment to be purchased through funds from the University of Nebraska. These lists have been sent to Dr. McKinney, Dean of Home Economics, University of Nebraska, for review. The equipment being ordered through the University of Nebraska is primarily that for research in food and nutrition and clothing and textiles together with some household equipment for laboratories. It is anticipated that the furniture, furnishings, and standard equipment for the laboratories will be secured in Turkey.

8. Offices.

The Home Economics Department office has been moved in the Horticulture Department across the hall to a larger room, and an adequate bookcase has been added. Otherwise, offices remain the same.

9. Cooperative Work With the Home Economics Extension Service.

During the past six months, weekly conferences have been held with Mary Border, I.C.A. Home Economist, and Suheyila Toeman, Turkish Home Economist for the Home Economics Extension Service. We have worked together on short course plans, food and nutrition programs, and examination questions and the holding of examinations for two Home Economics Extension candidates to be sent to the United States for study. Details of this examination will appear in the next six months report.

Follow-up teaching plans were developed with the Extension staff after the two weeks short course at Bornova, and aid was given to the staff in an evaluation of a homemaking demonstration recently given by Ankara Province Home Demonstration agents at an agricultural directors meeting.

Forty-five (45) agricultural province directors responded with enthusiasm for Home Economics Extension work when the Home Economics Extension Service staff presented their programs at an in-service conference for directors. The directors, in general, want to move faster than they should, since there is still not enough well-trained staff available to develop sound programs. There seemed to be an excellent attitude towards the Agricultural College and the Home Economics Department.

Through the initiative and help of Dean Hoiberg and Dean Izmen, Refika Dogan and I had the opportunity to attend the Tehran Middle East Agricultural Extension Conference and present the point of view of the College and its relation to Home Economics Extension programs. (For details see memorandum dated November 22, 1958.) A letter from Dr. Holtzclaw, Home Economist, I.C.A., Washington, dated January 6, 1958, said, "I am so glad you and your counterpart could come. I think it was a great advantage to have someone present from the university side."

The Ministry of Agriculture sent Bedia Berkol to the University of Tennessee for two years' training. Several conferences were held with Bedia and help was given her on evaluation of her training and aid in deciding where and what she would study in the United States.

10. Ministry of Education.

Contacts with the Ministry of Education have been somewhat limited, but I have, through the last six months, been working closely with Lemon Subasi who has asked me for help in locating four Home Economics specialists who would be employed by Ministry of Education funds to work with the Home Economics Vocational Education Department.

Mrs. Gorvine, the Home Economist from U.N. UNESCO who was here for two years, left in June, 1957. The United Nations plans to send a Home Economist from Brazil to take her place. Lemon Subasi reports that an education committee is continuing to put into action the changes developed last year.

The director of the Girls Teacher Training Institute who was reported as not being interested in improving Home Economics vocational programs resigned and a new staff person, Cemile Devrim, was appointed. I have not met the new director but it is my understanding that she is interested in broadening homemaking programs in Turkey, so we look forward to cooperative work with her through Lemon Subasi.

11. Turkish Home Economics Association.

Refika Dogan, who was asked to act as Chairman in organizing the Turkish Home Economics Association, spent considerable time in having the constitution and by-laws developed and securing the necessary signatures in order to establish the organization. The elections last fall made it necessary to postpone working on this project until December. Since Refika is going to the United States, a new committee has been selected. The new committee is Zatiye Delibeyoglu, Chairman, Lemon Subasi, Vice Chairman, Suheyra Toeman, Treasurer, Nariman, Secretary. We hope to have an organizational meeting in the spring of 1958.

12. Conferences.

Home Industry. An I.C.A. Home Industry group is designing and working with craftsmen in the field of furniture, furnishings, accessories and articles made of copper, meerschaum, especially small pieces, and other handicraft materials plentiful in Turkey. This group should be contacted in relation to bookcases, chairs, desks, and other equipment for the Home Economics building when such equipment and furnishings are to be purchased.

Nutrition Education. We have been consulting with three groups working on nutrition education in Turkey:

- (1) Ninette Van Dam, United Nations-Ministry of Education who handles the UNESIF school lunch feeding program,
- (2) Dr. Wray, who is at the Children's Hospital and is interested in the nutrition of children up to two years of age, and
- (3) Hugnette Merchiers, Nurse-Midwife, World Health Organization.

The Children's Hospital which is just new and has been partly financed through Ford Foundation funds was visited. Staff from these three programs are working together on the revision of the seven food groups we use in the United States to fit Turkey's conditions. A campaign to teach mothers of babies up to two years of age better feeding habits is also a proposed program. At the present time, many Turkish mothers breast-feed babies until they are twenty-four (24) months old and there are many pitiful examples of malnourished children in that age group. We also know that two out of five babies die within the first year in the villages. The Home Economics Extension Service is cooperating and at present the College staff is lending its active support through attendance at conferences and providing subject matter information.

Tehran Conference. Dr. Ernest Nesius spent several days in Ankara conferring with staff members regarding the Tehran Conference and Home Economics Extension program. We took him to visit a village where Refika had worked. He seemed especially interested in local leadership development in Turkey.

Homemakers Club. In the last report I told of the work I had been doing in helping the Turkish Women's Club develop Homemaker's Clubs for homemakers in middle and low income level families. During the summer this work stopped. This fall, Mualla Akarca, who was Executive Secretary and was the leading spirit in developing the Clubs, resigned to run for the National Assembly. Though she was not elected,

there has been no one who has taken on the development of this program. I think it is continuing, but I have not been in touch with it nor have I been asked to give further help.

13. Field Trips.

Two field trips have been taken in the last six months in connection with the continued study of standards of living and securing further background information.

Two weeks were spent in the Black Sea area and a great deal was learned about the differences in family life in this area in comparison with that of the Anatolia plains. People on the Black Sea Coast live in individual homes and not in villages. The area is highly productive of tea, hazelnuts, tobacco, and is one of the loveliest sections of Turkey. Six new rug factories, established by the Seli Company, will bring in a cash income to many families in this area. It would be well if Home Economics Extension work could be established in the provinces where the rug factories are located so an educational program could be developed paralleling increased income.

14. General.

Political. The election caused many of our activities to come to a standstill because people were unwilling to make decisions until they knew the outcome of the elections. Also, there is always a tendency for some activities to be dropped and others to be highlighted as changes are made in the Ministries. None of these activities affected the progress in the Home Economics Department except that we lost time because of people's great interest and need to participate in the elections.

The change of Dean of Agriculture in May, 1957, was anticipated but since Professor Ozbek is also Acting Dean of the Home Economics Department and left for a year in the United States, we have missed his dynamic leadership. Dean Izmen has asked Orhan Duzgunes to give us any help we need. We have not felt that we were without leadership.

Minister of Agriculture of Afghanistan. When we were at Bornova for the Home Economics Extension Short Course in September, 1957, we had the pleasure of meeting the King of Afghanistan. Later the Minister of Agriculture of Afghanistan came to visit the agricultural college and we had the opportunity to tell him about the Home Economics Department that was being established and the Home Economics Extension program. Later a letter was written to him telling him about cooperative homemaking educational programs with the United States government.

National Assembly. Through friends of Refika Dogan, we had the pleasure of spending an afternoon listening to the discussions at the Turkish National Assembly. At present, more than six hundred (600) representatives crowd into a room that was probably planned for two hundred (200). The new National Assembly building, which I understand is commodious, is to open soon. I have attended sessions of the United States Congress and think a Turkish session is on par. One is impressed with the heterogeneity of the men and women (seven women) who make up the Assembly. The way they conduct their business is much as we do. The discussion the afternoon we were there dealt with funds through I.C.A. for the purchase and upkeep of tractors and the establishment of trade organizations.

I.C.A. Lectures. It has been a privilege during the last six months to attend several I.C.A. lectures which gave me economic and political knowledge about Turkish national conditions.

University of Nebraska Conferences. Seven one-hour conferences of the University of Nebraska staff have been helpful in keeping us informed on our several interests.

PART II

Plans for January, 1958 to July 1, 1958.

1. Teaching.

Home Economics Philosophy and Content. The College-required course for juniors and seniors on Home Economics Philosophy and Content is scheduled for the spring semester. Dr. Rezan Sahinkaya will interpret and I hope will give some of the lectures. The lectures and student assignments will be reviewed and revised as needed.

Home Economics In-Service Training. The last of January eight lectures and some field work will be given at the Bornova Home Economics In-Service Training Center to eighteen (18) students who are taking the nine months course. This work will emphasize home management, housing, kitchen improvement, and work simplification.

2. Home Economics Building.

During the next six months, the architects will be completing the final plans with all the details for the Home Economics building. Paul Weigel, Dr. Rezan Sahinkaya, and I will continue to work on the best arrangements possible for research and teaching laboratories, lecture rooms, and other facilities.

3. Field Trips.

Two sections of Turkey that I would like to visit before I leave Turkey are Kayseri and Bursa. In the previous year and a half, I have had an excellent opportunity to visit important areas of Turkey and feel that I know enough about conditions to reach sound decisions on curriculum, building facilities, and other matters relating to the Home Economics Department.

4. Staff.

We are very happy to welcome Dr. Rezan Sahinkaya back to Turkey. She has been studying Home Economics in the United States for the past two years. Dr. Sahinkaya is well qualified to take the initiative in developing the study that I have mentioned in the last two reports on "Patterns of Living of Turkish Families."

5. Patterns of Living of Turkish Families.

One step has been made towards a comprehensive study of "Patterns of Living of Turkish Families" through the questionnaire on "Factors Related to Use of Time in Homemaking and Other Activities by Selected Housewives," that Suat Kundak, who

is working on for her Master's degree at Purdue University, is having collected and is analyzing. The Extension Service is collecting this information through county home demonstration agents. Through this survey and the methods being used to secure the data, we should have good experience upon which to base the broader study in which Dr. Sahinkaya has indicated a real interest.

6. Nutritional Data.

During this six months we hope, also, to contact the army and secure data available on the nutritional status of recruits that might be used by Ayse Erkut for her Doctor's thesis at Kansas State Agricultural College or incorporated in teaching materials for the Department.

7. Translation of Home Economics Bulletins and Textbooks.

The development of a long-time plan for the translation of college textbooks and bulletins is also still on the agenda for the next six months.

REPORT
by
Paul Weigel
Architectural Adviser
(Period Ending March 31, 1958)

ATATURK UNIVERSITY

Architectural plans for the chemistry and social sciences buildings are about completed and the electrical, plumbing and heating plans are also well along. Both of these buildings have been staked out and as soon as weather permits at Erzurum construction will begin. Temporary storage buildings have been built (so we are informed) for the storage of building materials and equipment. One immediate problem is getting the proper ministry to release 60 tons of steel reinforcing bars to help get the show on the road. But the Rector, who seems to know his way around politically, believes he can see the right "boys" for that. The Rector also stated that the contractor hopes to have both buildings "roofed in" by the end of the 1958 building season (i.e.) this fall. So if all goes well--with equipment, labor, materials, etc., Ataturk University should become a very impressive part of the Erzurum skyline by the fall of 1959. It is planned to requisition certain buildings in Erzurum so instruction can begin on a somewhat curtailed basis this fall.

In addition to the above two buildings, contracts for the housing of 400 students and 120 faculty have been let. A second firm of contractors has been awarded the housing contracts. This should stimulate competition and result in speeding up construction work. The housing under contract for the staff will comprise three large apartment buildings. One building will provide attractive living quarters for 32 unmarried staff. A second building will be for 48 married staff, each dwelling unit to contain a living room, dining room, two bedrooms, study, kitchen and one and one-half bathrooms. The third building will contain the same facilities for 40 staff plus one more bedroom. The living room in these units will be of the studio type--two floors high. All of these apartments will be very attractive; revolutionary for Erzurum and it is my hope they will establish a new standard for housing in Eastern Turkey.

Working with the Turkish architects and Public Works folks has been highly interesting. To be sure, the language barrier occasionally causes confusion, but since one of the architects is German trained and since I still retain a fair speaking knowledge of German, we get along well enough.

Turkish architects believe in circular stairways as principle means of vertical circulation. This has been the subject of debate between us and I believe I've succeeded in making them aware of hazards of circular stairs versus the public safety. Circular stairs have been eliminated from some of the principal Ataturk buildings.

I was able to get several copies of the "National Building Code" from the National Board of Fire Underwriters. I gave one each to the architects for Ataturk, Ankara Home Economics buildings, and to the folks at the Ministry of Public Works, and explained to them the reasons for some of the provisions that are included in our codes in the States. I hope, too, that I may find someone here who can translate portions of our National Building Code into Turkish for adoption by the Ministry.

The plans at 1/100 scale for all of the above buildings had been completed and approved by the Ministry of Public Works before I arrived, so changes which I recommended were at first questioned by the architects. The Chemistry Building in particular needed major surgery. Fortunately, I located the latest copy of a text on the planning of chemistry laboratories by Coleman which I presented to them for their Library. I went through it page by page with them, explaining as best I could. They became impressed and so the way was paved for a tour of the Chemistry Department of Istanbul University which was built about seven or eight years ago.

There we met a young German-trained docent--who has since been advanced to professorship status--who proved a real asset. He became interested in the Ataturk project at once, and via German and Turkish--the good and very bad features of the Istanbul labs were pointed out and the architects were given a short but intensive course in laboratory building needs--on what makes such a building really click. He also agreed to confer with them whenever needed. This proved to be a great help in presenting my suggestions.

At the Ankara end I asked for and was assigned a chemistry professor from the Ankara University Science faculty. He too did yeoman's service. I had architects come to Ankara twice for conferences with our Ankara professor and as a result the final plans, especially for the Chemistry Building, are an improvement over the plans as originally approved by the Public Works.

Problems in regard to the other buildings are easily taken care of sometimes via compromises. I suggest something, the suggestion is politely received, but I'm never sure it is understood because of language problems. I wait to see if the suggestions show up in future drawings.

The Ataturk Development Committee plans to journey to Erzurum via train the week of April 14 to look over and make a practical survey of available buildings and facilities which may be requisitioned and converted to classroom and laboratory use for starting teaching operations this fall--and until our new buildings are ready for use. We will, of course, also look over the campus site, and note whatever activity has taken or is taking place. It is understood that we will make periodic visits to the site as the work progresses and report to the various ministries involved on procedures for speeding up the completion of each building, and services such as water, electricity, sewage, walks, heat, etc.

ANKARA UNIVERSITY

Mary Rokahr and I have been working with the Ankara architects on the Home Economics building for Ankara University. Those plans are proceeding nicely and should be completed within the next 60 days.

OTHER ASSIGNMENTS:

I had an interesting assignment about a month or so ago. Mr. MacDonald, Chief of ICA Public Services invited me to attend a meeting of the Executive Committee of the Florence Nightingale Hospital Foundation. This organization has purchased a tract of land in Istanbul on which they propose to build a nurses training school;

the training program for Turkish nurses is under the sponsorship of Columbia University. In addition to the nurses training school, there will also be built a dormitory with social and dining facilities, also a general hospital of 500-bed capacity--so planned to be expanded to 1000 should the need arise; also included will be a doctors office building for 60-80 doctors, together with central heating and boiler plant, storage facilities, etc. Really a sizable project in any language.

My contribution to the cause was to advise the Foundation of the need for employing American specialists in hospital design to advise and work with a capable firm of Turkish architects in planning so important a project. The importance of a Florence Nightingale Hospital and nurses training center, located in this part of the world is not only of vital importance to Turkey but to the entire Middle East. New and improved hospital planning, operation and maintenance are so important here, and especially important is the need for lifting the social and economic and professional status of the Registered Nurse into where it should belong in the Middle East area.

The Turkish architects are capable, creative, and well trained in structural design and are excellent draftsmen. Some of their "traditional" planning patterns occasionally are at variance with American practices, but then so too are our respective customs. On such points I usually try to point out the merits of our planning practices versus theirs.

FINAL REPORT

by

Cecil T. Blunn
Specialist, Animal Husbandry

This report covers the period at Ankara University from September, 1957 to March, 1958.

Most of the period was taken up with teaching an undergraduate biometry course. The course this year represented a departure from former years because this is the first time it has been divorced from the genetics course. Also, it is the first time that the Agricultural Economics students have taken a general statistics course. Heretofore, students in this department have taken a special course that dealt with the philosophy of statistics rather than the analysis of data.

The biometry course this fall again pointed up the futility and wrongness of foreign specialists teaching undergraduate courses through an interpreter. The students would have received much more information if my interpreter had taught the entire course. Teaching through an interpreter we waste more than half the class time. When a point is completely obscure, the interpreter has to explain and clarify it in Turkish. It seems to me that if he can explain the difficult parts, he should be perfectly capable of handling the easy parts of the course.

An openbook final examination was given in the course. The students were not asked to memorize a single formula. Rather they were given different conditions and asked if such is the case, what would be the results using the conditions given. In other words, they were required to think and reason from the general thesis to the specific solution. This type of work is foreign to the students and the majority of them did poorly. Some copied the formulas from their notes, or Dr. Duzgunes' book and then could not work the arithmetic correctly. A number of students told me that $48 \div 6$ was 7.9!

One student came to the next to the last lecture for the first time in the semester. Apparently he came then only to say that the examination should not be until the end of the month because he would not have enough time to study for the final if it were given at the scheduled time.

I recommend that (1) students be required to attend class and be marked for attendance, (2) short quizzes be given during the semester, (3) the class period be lengthened to 50 minutes and the semester lengthened to 18 weeks, (4) the students be required to think rather than memorize, and (5) the standards be raised so that students who were not willing to work would lose their government bursae.

These recommendations are similar to those made by most of the Nebraska personnel. Unless, however, the professors are willing to work a little more, our recommendations will fall on deaf ears. The professors must want to change the status quo before any progress will be made in bringing the Faculty up to date. The changes which we have recommended will mean that the professors will have to work more.

COOPERATION WITH ICA PERSONNEL AND MINISTRY OF AGRICULTURE

The livestock personnel at ICA and the livestock specialists of the Nebraska Group met about once a month during the fall and winter period. Probably no momentous problems were solved, but we had an opportunity to exchange thoughts and information. We were in general agreement on changes which should be made before Turkey could be said to have a sound Animal Husbandry Industry. We were hard put to bring forward suggestions that would be acceptable to the Ministry in implementing the changes suggested.

Last fall, Dr. Brown, Head of the Food and Agriculture Section, called a group of us together to discuss possible short courses which might be given co-operatively by the Agricultural Faculty (Turkish and American members and ICA) for the Ministry of Agriculture personnel.

Five possible short courses were suggested. These were discussed with the Ministry of Agriculture and in general outline were agreed to. The five were: Soils, Plant Production, Animal Production, Statistical Methods, and Research Philosophy and Project Planning. In the last few months, a reorganization within the Ministry has ruled out, temporarily at least, the last course.

The statistics short course seems to be the only one that is to be given this year. Zeki Sayar, of the Cotton Production Office of the Ministry of Agriculture staff, is giving a series of lectures on the Theory of Statistics; W. V. Harlan is lecturing on Field Techniques and Designs; and I am talking on Methods and Analysis of Data.

The course has the personal approval, sanction and interest of the Minister of Agriculture. The Under-Minister opened the course on March 10, and the Minister attended my first lecture that afternoon. As a result of this interest by the Minister, the participants are working harder this year than they did last year.

My feeling is that the American specialist can do more good giving short courses to workers in the field than we can to undergraduate students. It is a pleasure to work with these people. They recognize their short comings and are eager to learn. Most of the students do not seem to care.

I feel that if I have made any contribution to Turkey, it is in the two short courses that I have helped give to the Ministry of Agriculture personnel.

REPORT OF PROGRAM OF WORK IN CONNECTION
WITH THE UNIVERSITY OF NEBRASKA-ANKARA
UNIVERSITY PROJECT

by

L. L. Claypool
Specialist
Fruit and Vegetable Storage

This report covers the second and final six (6) months of my program of work in Turkey.

My activities since the previous report may be summarized under the following headings:

1. Consultation with Ministry of Agriculture officials in regard to selection of a site for a research center at Alata for horticultural crops.
2. Consultation with Ministry of Agriculture officials in regard to Experimentation Station programs on fruit production in Turkey.
3. Consultation with Mr. Lindsey Brown, Chief of Agriculture Section, I.C.A., in connection with need for horticultural specialist in I.C.A. to work with the Ministry of Agriculture.
4. Revision of written lectures.
5. Teaching activities at the Agricultural Faculty.
6. Short course for Ministry of Agriculture officials in connection with standardization and marketing of horticultural crops.

1. Selection of Site for Research Center at Alata.

I was appointed on a committee of the Ministry of Agriculture to help select a site for a Research Center for horticultural crops in the vicinity of Mersin. This area is important not only in the production of citrus fruits but also of many early spring and late fall vegetable crops. The Ministry of Agriculture had decided that the Research Center might be established on land presently being used by the agricultural school at Alata.

The appointed committee visited the area in September and agreed that a sizeable piece of land on one part of the property would be well adapted to the establishment of experimental plots, either fruits or vegetables. The land in question is approximately level and of good quality. Its previous use would not detract from the establishment of nutrition plots should this be one of the projects undertaken.

In addition to selection of the site, my opinion was sought in regard to an experimental program that might be established in the area. I made a number of suggestions which were listed in the notes preliminary to the writing of the report on the committee's recommendations which has not yet been accomplished.

One of the major projects suggested was the establishment of intense research work on new rootstocks that are resistant not only to the organism causing brown rot gummosis but also to the virus causing "quick decline." As reported previously, this disease could be disastrous to the Turkish citrus industry since all present orchards are on susceptible rootstock. Other suggestions included the establishment of nutrition work not only on so-called major elements but also on various minor elements where foliar deficiency symptoms have been noted, irrigation experiments, and variety trials with stone fruits having short rest periods.

2. Fruit Experiment Station Program in Turkey.

At the present time, there are in Turkey numerous governmental stations involved in fruit production problems and the production of nursery stock. These are called Experiment Stations, Nurseries, and State Farms. I have observed no clear-cut differences between the three in most cases. As a rule, the experiment stations are experiment stations in name only with principal attention being devoted to the production of nursery stock. As exception to this, according to my limited observations, was the Grape Station at Bornova and to a lesser degree the Olive Station also at Bornova.

In my opinion, nurseries which produce trees and vines for sale and experiment stations assigned to the solution of production problems are not compatible. The Ministry of Agriculture has indicated an interest in the complete separation of these activities, and also in the consolidation of experiment stations in order to better support and better staff a limited number of these.

At his request, I consulted with the Head of the Fruit Section of the Ministry of Agriculture in regard to all fruit experiment stations, nurseries, and state farms. While I do not feel that this consultation was complete, certain apparently acceptable suggestions were made in regard to stations that might be retained for experimental purposes and those that might be transferred completely to some other type of program.

A number of suggestions were also made in regard to the establishment of specific research projects in particular locations, but suggestions in this regard were very incomplete. I have also had an opportunity to talk on at least two occasions with the General Director of Agriculture along similar lines and found keen interest on his part in the establishment of an effective research organization in place of the present one which exists in name only.

Major problems to be overcome are first, qualified personnel, and, second, the procurement of suitable equipment for certain types of research. The former is by far the most important and is not aided by the present salary schedules either in the Ministry of Agriculture or the University. I am sure that suggestions previously made by Professor Ozbek were important in connection with certain discussions and Docent Dr. Mehmet Dokuzoguz has been very effective in presenting ideas where it seemed that such might be of value to the research program in Turkey.

3. The Need of an I.C.A. Horticultural Specialist.

As previously reported, the area devoted to the production of horticultural crops in Turkey is very large and is expanding at a rapid rate. The problems

associated with the production of these crops are also numerous and of great importance. So far no American specialist has been brought in by I.C.A. to assist in these problems. However, perhaps partly as a result of the numerous problems presented to me which were much beyond my assignment as Specialist in the Storage and Marketing of Fruits and Vegetables, Dr. Lindsey Brown, Head of the Agricultural Section of the I.C.A. in Turkey, has expressed an interest in bringing a specialist to Turkey to assist in problems associated with the production of horticultural crops. I have discussed this matter with Dr. Brown and some of his associates, and understand that there is considerable likelihood that a specialist in the horticultural field will be sought to aid the Ministry of Agriculture in their fruit and vegetable program.

In my opinion, the person should have a broad experience in horticultural crops since there is greater need for this than one with a highly technical experience in a limited field.

4. Revision of Prepared Lectures.

The horticultural group at the University of Ankara are anxious to publish my lectures as a book for future use in the teaching of the course on Storage and Marketing of Fruits and Vegetables, and there is also considerable interest in making this available to personnel in the Ministry of Agriculture. I have revised and considerably extended the material originally prepared for teaching in the spring semester of 1957, and while it is obviously very incomplete, it does cover pretty well the basic principles involved. It also emphasizes certain problems and potential solutions as my limited experience in Turkey has indicated to be desirable.

5. Teaching.

During the fall semester just completed, I have given the course on Storage and Marketing of Fruits and Vegetables to approximately twenty-six (26) students majoring in horticulture. The attendance has been surprisingly good especially considering that the class did not have a good attendance record during previous semesters. The average attendance was between eighty (80) and ninety (90) per cent and indicates a definite interest on the part of the student of the subject matter being presented.

I should like to comment briefly again on the teaching system used in the University of Ankara and patterned after the European system. The students seem not to be penalized for lack of progress and many of them seem not to appreciate the responsibility accompanying their selection by the Turkish government to receive a free education. In my opinion, considerable improvement in the quality of work accomplished by the students would follow a change in policy that would penalize a student not progressing satisfactorily by suspension or dismissal. This would also be important in making better use of the facilities of the University and the time of its professors. I am inclined to doubt the validity of the European system in Turkey at the present time. This system assumes that the student will attend class as it serves his advantage but may accomplish most of his purpose by independent library study. For such a method of instruction to be successful, there must be good library facilities of up-to-date publications written in the language of the student. This is not presently the case in Turkey, and although a limited number of books have been translated into Turkish, original manuscripts of technical papers are not available.

A further comment is repeated in connection with the amount of time a student sits in lecture. Some students are reported to be attending lectures between thirty (30) and forty (40) hours a week. I doubt that this much time in class is desirable although the more limited lecture system as used in the United States with extensive outside readings is not practical at the present time here either.

It would seem possible that the teaching program might be altered with consolidation of certain courses and perhaps better balancing of the student's semester load throughout his collegiate career, in order to reduce both the numbers of courses and the time spent in the classroom. I do not consider that the student puts in more hours of effort than in American universities because he has little use for library facilities. Certainly there is important need to build up the library and the amount of current literature available on scientific subjects.

6. Short Course.

During a three-week period in January, I gave a short course to selected personnel from the Ministry of Agriculture. More than twenty (20) people were brought in from various parts of Turkey to attend this course in addition to a few people from other government organizations. The course was scheduled for approximately twenty (20) lecture hours a week and was designed to cover somewhat the same material as has been covered in the courses I have given at the Faculty. However, the emphasis was somewhat different and a considerable part of the last week was spent in discussing problems associated with specific crops. The response of the personnel attending the course was extremely gratifying and the General Director and his staff of the Ministry of Agriculture expressed great appreciation for the course.

The Ministry has just recently appointed a person to undertake standardization programs in connection with fruits and vegetables and this course was looked upon as basic to the new program. Certainly the need for standardization and other improvements in connection with the marketing of perishable fruits and vegetables is undeniable and the interest of the Turkish participants was very high. The question of speed of action is somewhat uncertain because of the complex nature of the problems involved which, in many cases, must go back not only to cultural practices but even to the selection of varieties. I do feel, however, that a big step has been taken and that even though progress may be slow that it can be expected to continue.

At the present time, standardization of agricultural crops is under the cognizance of the Ministry of Commerce - probably a carry-over from the time that Commerce and Agriculture were combined. If standardization is attempted in perishable agricultural commodities, it should be done by representatives of the Ministry of Agriculture because of the need of agricultural background. However, the combination of research and enforcement activities in the same individuals would be unwise.

Our stay in Turkey for a little over one year has been extremely gratifying and challenging. Time has never hung heavy on my hands. I feel that I have learned a great deal, gained much in the way of perspective, and hope that I have contributed in some small way to the future well-being of the Turkish people. I am grateful to the Faculty of the College of Agriculture of the University of Ankara, to the officials associated with the Ministry of Agriculture, and especially to the University of Nebraska in making these things possible.